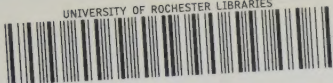


UNIVERSITY OF ROCHESTER LIBRARIES



3 9087 00543891 8

A black and white illustration of a soldier in a helmet and uniform, standing next to a tall stack of books. The soldier is looking towards the camera with a slight smile. The books are stacked high, reaching above his head.

WAR SERVICE LIBRARY

THIS BOOK IS
PROVIDED BY
THE PEOPLE
OF THE
UNITED STATES
THROUGH THE
AMERICAN
LIBRARY
ASSOCIATION
FOR
THE USE OF
THE SOLDIERS
AND SAILORS

THE UNIVERSITY
OF ROCHESTER
LIBRARY



THE
SARAH McGUIRE
FUND

**PRINCIPLES GOVERNING THE
RETIREMENT OF PUBLIC EMPLOYEES**

**PUBLICATIONS OF THE
INSTITUTE FOR GOVERNMENT RESEARCH**

STUDIES IN ADMINISTRATION

The System of Financial Administration of Great Britain

By W. F. Willoughby, W. W. Willoughby and S. M. Lindsay

The Budget

By René Stourm

T. Plazinski, Translator, W. F. McCaleb, Editor

The Canadian Budgetary System

By H. G. Villard and W. W. Willoughby (In press)

The Problem of a National Budget

By W. F. Willoughby (In press)

The System of Financial Administration of the United States

(In preparation)

Teachers' Pension Systems in the United States

By Paul Studensky (In press)

PRINCIPLES OF ADMINISTRATION

Principles Governing the Retirement of Public Employees

By Lewis Meriam

Principles of Public Employment

By A. W. Procter (In press)

**SERVICE MONOGRAPHS OF THE
UNITED STATES GOVERNMENT**

The U. S. Geological Survey (In press)

The Reclamation Service (In press)

The Bureau of Mines (In preparation)

D. APPLETON AND COMPANY

PUBLISHERS

NEW YORK

THE INSTITUTE FOR GOVERNMENT RESEARCH
PRINCIPLES OF ADMINISTRATION

PRINCIPLES GOVERNING THE RETIREMENT OF PUBLIC EMPLOYEES

BY
LEWIS MERIAM



D. APPLETON AND COMPANY
NEW YORK LONDON

1918

COPYRIGHT, 1918, BY
THE INSTITUTE FOR GOVERNMENT RESEARCH

Printed in the United States of America

JF
1671
M56P

THE INSTITUTE FOR GOVERNMENT RESEARCH

Washington, D. C.

The Institute for Government Research is an association of citizens for coöperating with public officials in the scientific study of business methods with a view to promoting efficiency in government and advancing the science of administration. It aims to bring into existence such information and materials as will aid in the formation of public opinion, and will assist officials, particularly those of the national government, in their efforts to put the public administration upon a more efficient basis.

To this end, it seeks by the thoroughgoing study and examination of the best administrative practice, public and private, American and foreign, to formulate those principles which lie at the basis of all sound administration, and to determine their proper adaptation to the specific needs of our public administration.

The accomplishment of specific reforms the Institute recognizes to be the task of those who are charged with the responsibility of legislation and administration; but it seeks to assist, by scientific study and research, in laying a solid foundation of information and experience upon which such reforms may be successfully built.

While some of the Institute's studies find application only in the form of practical coöperation with the administrative officers directly concerned, many are of interest to other administrators and of general educational value. The results of such studies, the Institute purposes to publish in such form as will insure for them the widest possible utilization.

Officers

Frank J. Goodnow,	Robert S. Brookings,	Charles P. Neill,
Chairman	Vice-Chairman	Secretary
Frederick Strauss,		
Treasurer		

Trustees

Edwin A. Alderman	Frank J. Goodnow	Charles D. Norton
Robert S. Brookings	Jerome D. Greene	Martin A. Ryerson
James F. Curtis	Arthur T. Hadley	Frederick Strauss
R. Fulton Cutting	Cesar Lombardi	Theodore N. Vail
Raymond B. Fosdick	A. Lawrence Lowell	Charles R. VanHise
Felix Frankfurter	Samuel Mather	Robert S. Woodward
	Charles P. Neill	

Director

W. F. Willoughby

U. of C. 6/10/31 4, 50



Digitized by the Internet Archive
in 2023 with funding from
Kahle/Austin Foundation

INTRODUCTION

The problem of providing for the retirement of public employees when they are no longer able to perform the duties of their positions is deceptive. It has an appearance of simplicity. At any one moment, the number of employees of advanced age in a government service is small as compared with the total number; and it seems but a simple matter to grant them suitable pensions, to be paid like salaries out of the current revenues of the state, and to fill their places with young and active successors. Frequently retirement systems have had their origin in just such simple provisions.

The history of such devices is always more or less the same. At the outset, the payments in the form of pensions amount in the aggregate to only a small sum, a mere fraction of the total payment for salaries. Each succeeding year, however, adds its new quota to the roll of pensioners, and although a few pensioners die, this new quota increases the total number. The aggregate amount of the pension payments therefore increases, and after a comparatively few years, the pension payments form a very considerable percentage of the total for salaries. The legislature and the public begin to realize that what in its beginning seemed an inexpensive method of providing for aged employees constitutes in fact a serious drain on the resources of the state. Attempts will then be made, especially in times of financial pressure, to curtail the amount of the expenditure for pension purposes. The reformers will encounter vested interests. Employees will advance the unanswerable argument that they were promised pensions, and they will ask if the state will break its promise to its employees and deny them what they have regarded as part of their compensation for services.

INTRODUCTION

The legislature establishing the pension system in the first instance will probably hear many claims for pensions advanced on the ground that the old employee has grown gray in the service and that the government owes some special consideration to the man who has given the best years of his life to its work. Not infrequently these arguments will be supplemented by the recitation of specific cases in which faithful government servants have ended their days in poverty and distress, because of some calamity which forced them out of the service without any provision for their support. Moved by an appreciation of the deserts of some of the faithful old employees and by compassion for those who have suffered from want of any suitable provision, the legislature will adopt a pension system.

Surprise is frequently manifested by legislative committees sitting a few years after the establishment of the system when they find that the employees of their day and generation refuse to regard the pensions as benevolent grants for meritorious services or for deserving cases, but insist upon considering them as something which they have earned as of right and to which they are as much entitled as they are to their pay. "Deferred pay" may become a general expression to define the nature of the payments.

Not only will the employees demand that the payments shall be made as of right and not as of grace, but they will also demand that in the event of certain contingencies, they shall receive allowances from the system, although it may be pointed out to them that such allowances are not of any special advantage to the government or even that they are directly contrary to its supposed interests. The employees will not be satisfied with the answer, because they will frequently hear of cases in which the system has resulted in hardship or injury to one of their number or his dependents, and they will agitate for change.

Under a retirement system adopted without study and forethought, the government will thus ultimately be confronted

INTRODUCTION

with two serious problems, the maintenance of proper relations with its employees, and the financing of so expensive a device as any retirement system must inevitably be. In facing these problems it will find its freedom of action impeded in almost every direction by the vested interests that have been created through the action of past legislatures and by the enormous liabilities that have been incurred.

All these difficulties, or at least almost all, can be avoided by forethought. The economic, social, and administrative questions involved can be clearly recognized by a study of the experience of governments that have developed retirement systems by the process of evolution and have left in their archives records showing the operation of those processes. The financial questions can be clearly foreseen by the experienced actuary. Methods of applying actuarial science to these questions have already been carried to a high state of development, and the legislative body which today adopts a retirement system without fairly accurate information regarding its future cost is guilty of neglect of its obvious duties to the public.

The object sought in preparing the present book has been primarily to set forth the principal economic, social, administrative and financial questions involved in establishing a retirement system and then, in so far as possible in limited space, to summarize the more important arguments for and against alternative lines of action.¹ In the presentation of the argu-

¹ So far as is known this book is the first of its scope. The following extracts from "A Comprehensive Plan of Insurance and Annuities for College Teachers," by Henry S. Prichett in Bulletin No. 9 of the Carnegie Foundation for the Advancement of Teaching, New York, 1916, p. 9, is of interest in this connection:

"The literature dealing with these pension systems is extensive, but it is devoted almost exclusively either to a description of the systems themselves or to a consideration of the actuarial and financial problems that are involved. In all cases it is assumed that pensions are desirable and are in the interest of the class or social group for which they have been planned, provided the pension system adopted is financially sound.

For this reason those who seek to deal with the problems of pen-

INTRODUCTION

ments the bias of the writer must inevitably at times become apparent, and occasionally a question may have been seen from too narrow a point of view. Clear recognition of the questions involved has seemed, however, of far more importance than the attempted answer of a single student of the subject. Sound answers must be the product of many minds.

No attempt has been made to outline an ideal retirement system. In the course of the discussion the statement is made that the ideal retirement system is one that is equitable as between the government, the employees and the public, that meets the special needs of the service, and is financially sound. Many general principles may be laid down by which an ideal system for a particular service may be developed, but they have to be applied in the light of facts regarding that particular service. An ideal retirement age for policemen and firemen, for example, would not be an ideal age for a clerk. A uniform "flat" pension alike for all might be an ideal provision for a homogeneous service in which all enter young, serve about the same length of time, and progress at a practically uniform rate of salary advancement, but it would be anything but ideal as applied to a complex service. In retirement legislation, therefore, there is no one best device, though unquestionably there are many which may be recognized as best for a particular purpose.

In studying past experience to learn what questions are involved and what arguments are advanced under each, attention has been given in the main to the rich material contained

sions in a democracy like the United States gain scant help from this large mass of literature, for back of these actuarial and financial questions lie others still more fundamental which concern themselves with the inherent wisdom and fairness of the pension system itself. Such an enquirer desires to be assured that a pension system will do good rather than harm, and to ascertain whether the pensioning of a particular class or group tends to demoralize or to stimulate. Upon such questions this mass of pension literature throws little light. Before one undertakes actuarial and financial computations, however, before he makes the assumptions upon which his pensions are to be predicated and frames the rules on which they are to be conferred, these questions must be met in one form or another."

INTRODUCTION

in the *British Parliamentary Papers*. They have the manifest merit of being in English, but that is by no means the only reason for their selection. England has had long experience with retirement systems. Its system for civil servants was formally established in 1810, although informal devices were in use prior to that time, and since then it has been in a process of evolution. At each time of change careful investigations have been made and a great mass of evidence has been secured, all of which has been collected and preserved with typical British thoroughness. Retirement systems have also been adopted in England in the past century for many other classes of public employees, and English and Scotch actuaries have done much in developing actuarial science as applied to retirement systems. The English experience is therefore very comprehensive. It has the further advantage of having been evolved under a political and social environment more nearly like our own than would be found in other European countries that have had long experience with retirement systems. Undoubtedly an equally detailed study of the operation of the systems in other foreign countries could have been made with profit, but the time required was prohibitive. Examination of the detailed evidence that shows how a system actually works is manifestly a great time-consuming process; and much of it in a foreign tongue would have delayed the preparation of the manuscript without probably adding a compensating amount to its value. Much general reading regarding American and European systems has been done, but the great majority of the principles have been evolved from a study of the detailed English evidence.

An effort has been made in so far as possible to avoid the use of the term "pensions." For the term "pension systems," "retirement systems" is substituted; and for the term "pensions," "benefits" and "allowances" are frequently used. The word "pension" has too many different connotations to permit of its use in an expository undertaking like the present. The main problem in preparing a book of this character is to secure

INTRODUCTION

clearness, and that can hardly be attained if a word like "pensions" is used, which frequently has a different meaning in the mind of the reader than in the mind of the writer. "Pension" unfortunately frequently connotes a voluntary grant for meritorious service, and it prevents a clear conception of the fact that the government adopts a retirement system largely as a business measure and that the employees regard it as part of their wages. The term "retirement systems" has at least the merit of not awakening a whole host of preconceived ideas.²

The general arrangement has been to consider first the social, economic and administrative problems involved and then the financial problems. No attempt has been made to go into the technique of actuarial science as applied to retirement systems, as that is a subject for an experienced actuary. A general statement of conclusions is presented at the end of the volume.

The writer wishes to acknowledge his indebtedness to Mr. George Burton Buck, Mr. Paul Studensky, Mr. Frederick L.

² "The word pension in the exact sense applies to a payment made to an individual without his coöperation. In the first edition of his famous Dictionary of the English Language, Dr. Johnson defined a pension as 'an allowance made to anyone without an equivalent. In England it is generally understood to mean pay given to a state hireling for treason to his country.' 'Pensioner' he defines as 'one who is supported by an allowance paid at the will of another; a dependent.' These definitions were the source of no small embarrassment to the good doctor himself a few years later when, upon the solicitation of friends, George III conferred upon him an annual pension of three hundred pounds. After some hesitation Dr. Johnson accepted the pension and lived contentedly upon it to the end of his life, although his critics never ceased to insist that his political views had been warped by its acceptance. These definitions reflect, no doubt, somewhat of the prejudice of the great scholar, but they reflect also a general attitude of mind long since obsolete on the continent of Europe, but still common in America and in England, which looks askance upon the acceptance of a pension, both on account of the implied dependence and also on account of the possible effect such acceptance may have upon the opinions of the beneficiary. It was partly in view of this feeling that the pensions of the Carnegie Foundation have been denominated retiring allowances. They are, of course, pensions in the true sense."—"A Comprehensive Plan of

INTRODUCTION

Hoffman, Mr. William F. Willoughby, Dr. Samuel McCune Lindsay and Dr. Frederick A. Cleveland for reading the manuscript and for making many valuable suggestions.

Insurance and Annuities for College Teachers," by Henry S. Pritchett in Bulletin No. 9 of the Carnegie Foundation for the Advancement of Teaching, New York, 1916, p. 5.

CONTENTS

INTRODUCTION

CHAPTER I

THE OBJECTS SOUGHT IN ESTABLISHING A RETIREMENT SYSTEM

	PAGE
The three parties to the system	I
The parties enumerated	I
The order of their consideration	2
The objects sought by the government	3
The objects enumerated	3
The elimination of the superannuated	3
The situation in the absence of a retirement system	4
The cost of superannuation	5
The superannuated in responsible positions	5
Choking the avenues of advancement	6
The moral effect of retaining the superannuated	8
Substitutes for a retirement system suggested as devices for eliminating the superannuated	10
A fixed age for dismissal	10
Annual dismissal of a fixed percentage of employees	10
A fixed term of office	11
A system of efficiency ratings	11
Return to the "spoils" system	13
The elimination of the disabled	13
The nature of the problem	13
The loss due to disability	14
The improvement of the morale	14
The retention of able employees now lost	15
The attraction of able employees	15
Improvement of staff the sole object of the government	16
The objects sought by the employees	17
Future entrants vs. present employees	17
The differences between the two classes	17
Unfortunate natural tendency to consider present employees	18
Bad results from following natural tendency	19
Difficulty of reforming system	20
Future entrants to be considered in devising permanent system	20
The point of view of future entrants	21
Basis for statements	21
Compensation and not charity	22
Positive advantages to the employees	23

CONTENTS

	PAGE
The objects sought by the public	25
The objections to the establishment of a retirement system	26
No objection in behalf of government as large employer	26
The objection of employees to compulsory feature	26
The individual liberty argument	26
Optional systems ineffective	26
The argument for compulsion	28
Five objections raised by the public considered	28
The objections enumerated	28
Keeping in the service employees who should be eliminated	29
Discouraging personal thrift	29
Attacking problem from wrong side, since what is needed is general instruction in the use of money	31
Creating a specially privileged class supported in old age, or in event of earlier disability, at the expense of the taxpayer	32
Opening the door of the treasury to a pension graft	34
Necessity for expert actuarial advice	34
Summary	36

CHAPTER II

ANALYSIS OF THE PROBLEM OF DEVISING AN ADEQUATE RETIREMENT SYSTEM

Purpose of the chapter	38
What contingencies are involved?	39
Shall a benefit be granted in event of the contingency?	41
Upon what conditions shall a benefit be granted?	41
The superannuation benefit	42
The disability benefit	43
What shall be the amount of benefit and how shall it be determined?	44
The superannuation benefit	44
In relation to salary	44
Independent of salary	44
Directly or indirectly dependent on salary	45
The salary scale	46
Objections to salary scale	46
Degree of relationship	47
In relation to length of service	47
In relation to economic need	47
The disability benefit	48
Disability due to ordinary causes	48
Disability due to the performance of duty	49
The withdrawal benefit	50
Benefit in event of death in active service	50
Ordinary causes	50
Causes arising in performance of duty	51
Death after retirement	51

CONTENTS

	PAGE
What determines the cost of the system	52
Number of benefits and cost	52
Conditions upon which granted and cost	53
The amount of benefit and cost	54
Equities between individual employees and cost	54
Age at entrance, sex, occupation and cost	55
How shall cost be divided between government and employees	57
Exaggeration of the importance of the issue	57
Method of determining real significance	58
The basis for division	59
Direct contributions	59
Indirect contributions	59
Expenses of management	59
Guarantee of interest	60
Guarantee of solvency	60
Shall the system be operated on the actuarial reserve or the assessment or cash disbursement basis?	60
Description of the two with statement of differences	60
The merits of the two contrasted	62
Are actuarial computations necessary?	62
What is the nature of the actuarial deficit on creation of system?	63
What can be done if the service to be provided for is small?	63
What are bad financial practices?	64
How shall the system be protected from financial indiscretions of employees?	64
The arrangement of the detailed discussion	65

CHAPTER III

THE CONTRIBUTORY VS. THE NON-CONTRIBUTORY SYSTEMS

The nature of the question	67
Definitions	67
Benefits not necessarily affected	67
Financial basis not necessarily affected	69
Cost of benefits not affected	71
Unimportant economically to new employees	71
Of moral or psychological importance mainly	76
Contributions disclose true nature of system	76
Promote intelligent management	78
Check tendency toward "pension graft"	78
Contributory system more flexible	78
Four principal objections to contribution	79
The objections enumerated	79
Failure in the English Civil Service	81
The facts as to the English experience	81
Against interests of government	84
The death benefit	84
The benefit on resignation or dismissal	85
Provision for family of dismissed employee	86
Disciplinary control	86

CONTENTS

	PAGE
Against interests of employees	87
The low salary argument	87
Objections to contributions	88
Employees protected by contributions	89
Expensive to administer	89
Summary	91

CHAPTER IV

THE WHOLLY VS. THE PARTLY CONTRIBUTORY SYSTEMS AND THE INDIRECT CONTRIBUTIONS OF THE GOVERNMENT

Definition	92
The merits and defects of wholly contributory systems	92
The merits and defects of partly contributory systems	95
The basis of division under partly contributory systems	96
The half and half basis	96
Division according to the degree of interest	96
Equity as between employees	97
Consideration of equities in division	97
Uniform governmental contributions	98
Indirect contributions	99
Expenses of management	99
Guarantee of solvency	100
Guarantee of interest rate	101

CHAPTER V

THE SUPERANNUATION OR SERVICE BENEFIT

The objects sought in establishing the benefit	103
The conditions upon which granted	104
The different types enumerated	104
Retirement in discretion of the government	105
The theory of the discretionary pension	105
Discretionary pensions injurious to the government	106
Discretionary pensions financially uncertain	107
Discretionary pensions against interests of employees	107
Retirement as a right at the option of the employee	108
Failure to protect the government	109
Compulsory retirement on completion of fixed conditions	109
The inelasticity of fixed conditions	109
The English device of retention after compulsory age in exceptional cases	110
Optional retirement after fulfilling minimum conditions and compulsory retirement after fulfilling maximum conditions	112

CONTENTS

	PAGE
Shall conditions be based on age alone, service alone, or age and service combined?	112
Age conditions preferable	112
Unwarranted demands for retirement after short service	113
Minimum service requirements	115
Factors involved in determining upon exact retirement age	115
The nature of the work	115
The possibility of transfers from athletic to sedentary services and correlation of services	116
Improvement of working conditions	118
The cost of the benefit	118
The desires of the employees and the value of their opinions	119
The interests of the public	120
The amount of the superannuation benefit	120
Three divisions of the subject	120
The amount of the superannuation benefit and the amount of salary	121
Three different classes briefly described	121
Benefits entirely independent of salary:	
The discretionary sum independent of salary	123
Objections to discretionary provisions	123
Objections to maximum and minimum limitations	123
The fixed amount independent of salary	125
The fixed contribution independent of salary	126
Benefits directly dependent on salary	126
Their natural development	126
The salary scale required in their use	127
The nature of the salary scale	127
Four objections to the use of the salary scale	128
The introduction of an unstable element into the system	129
The interference with administrative changes	131
The introduction of an element of unfairness between classes of employees and different employees of the same class	131
Three answers to argument of unfairness considered	133
The necessity for changes in the rates of contribution	134
The statement of Mr. William Sutton regarding the salary scale	135
The terminal salary plan	137
Two variations of terminal salary	138
The average salary plan	139
Benefits indirectly dependent on salary	139
Method of operation described	139
Give maximum financial stability	140
Give absolute equality of return	142
Objections to this method of providing benefits	142
Insufficiency of benefit, and	142
Inapplicability as a provision for disability	143
Weight of these objections	144
Elaborations suggested to overcome objections	144
Elaboration of accounts	146

CONTENTS

	PAGE
The amount of the superannuation benefit and length of service	148
The desirability of a relationship	148
Defects of a system not establishing a relationship	148
Two methods of establishing relationship	150
Basing the amount of the benefit on the purchasing power of contributions	151
Merits and defects	151
Elaborations to overcome defects	152
Determining the amount of benefit by an arbitrary service scale	153
Merits and defects	154
The amount of the superannuation benefit and the economic and social needs of the employees	155
Four classes of allowances enumerated	156
A sum in aid of subsistence	156
The minimum of subsistence	157
For the employee as an individual	157
For the employee as head of a family	158
The necessities of the standard of life	159
The absence of sacrifice	159
Changing general terms into concrete figures	161
The cost of the superannuation benefit	162
The factors determining cost	162
Factors causing differences in cost between different em- ployees:	
The factors enumerated	163
Age at entrance	164
Sex	166
Differences between sexes in:	
Withdrawal rates	166
Mortality	167
Superannuation retirement	167
Physiological explanation	167
Psychological explanation	168
Economic explanation	168
Occupation	169

CHAPTER VI

THE DISABILITY BENEFIT

Definition	171
PART I. ORDINARY DISABILITY NOT DUE TO THE ACTUAL PER- FORMANCE OF DUTY	
The objects sought in establishing a benefit	172
The danger of fraud	174
The nature of the temptation	174
Safeguards	175
Methods enumerated	175

CONTENTS

	PAGE
Medical examinations	175
Time at which made	175
Selection of physicians	176
Diminishing attractiveness of benefits	177
Placing financial burden on employees	178
Safeguards a protection to honest employees	178
The conditions upon which granted	180
The nature and the extent of the disability to be covered	180
Permanent disability only: leave regulations to cover temporary disability	180
Protecting sick leave from abuse	181
Medical examinations	181
Other devices	182
Disability must disqualify for all classes of government work	184
Disability must be due to accident or disease	185
Suggested procedure for distinguishing mental or physical disability from moral disability	185
The length of service to be required	187
The problems involved	187
Medical examinations on entrance	189
The amount of the disability benefit	190
Three divisions of subject	190
The amount of the disability benefit and the amount of salary	190
The benefits independent of salary	191
The discretionary amount	191
The fixed amount	192
The fixed contribution	193
The benefits directly dependent on salary	194
The salary scale	194
The benefits indirectly dependent on salary	194
Correlating the superannuation benefit and the disability benefit	195
The nature of the problem	195
Methods of solution	195
Disability devices giving equality of return	196
The amount of the disability benefit and the length of service	197
The amount of benefit and the social and economic needs of the employee	199
Four classes considered	199
The cost of the benefit	201
The general factors determining cost	201
The factors enumerated	201
The founders' control over cost	202
The mortality rate of disability pensioners	203
The mortality rate in the active force	203
The real disability rate	204
Differences in cost for different classes of employees	204
Age at entrance	205
Sex	205
Occupation	206

CONTENTS

	PAGE
The contributory vs. the non-contributory system for disability insurance	206
Distinction in applicability between disability and super-annuation	206
Absence of right to return of full contribution for disability insurance on withdrawal	206
Less danger of popular disapproval	207
Arguments in favor of non-contributory system	208

PART II. DISABILITY DUE TO THE ACTUAL PERFORMANCE OF DUTY

The advisability of providing a special benefit	208
Relation to workmen's compensation law	209
Benefit non-contributory	211
The amount of the benefit	211
In relation to salary	211
In relation to the extent of the disability	212
In relation to the economic need of the employee	213
Correlation with other benefits	214
No return in event of withdrawal	215

CHAPTER VII

BENEFITS ON WITHDRAWAL FROM THE ACTIVE SERVICE WHETHER BY RESIGNATION OR DISMISSAL

The extent of the benefit advocated	216
The distinction between resignations and dismissals	217
Four arguments against distinction	217
The arguments enumerated	217
Difficulty of making distinction	217
Danger of discrimination	218
Doubtful administrative expediency	218
Doubtful social expediency	219
Protecting the interests of the family	220
Resignations and dismissals not distinguished	221
The desirability of the benefit	221
To the government	221
"Putting premium on withdrawal" not a conclusive objection to payment of benefit	221
Benefit encourages elimination of the inefficient	221
The real problem of the government	223
To the employee	223
The importance of the right to resign without forfeiture:	
To secure opportunity for self-development	224
To increase earnings	224
To escape from intolerable situations	225
To the public	226
One object of the public, the prevention of destitution may be defeated by forfeitures on withdrawal	226

CONTENTS

	PAGE
The objections to the benefit	230
The objections enumerated	230
Encouragement of resignations	230
Increase of cost	230
The amount of the benefit	231

CHAPTER VIII

A BENEFIT IN EVENT OF DEATH IN THE ACTIVE SERVICE, DEATH NOT CAUSED BY THE ACTUAL PERFORMANCE OF DUTY

The objects sought in establishing the benefit	233
By the government	233
By the employees	234
By the public	234
Objections to the benefit	235
The objections enumerated	235
Government not interested	235
Cost increased	235
Employees can protect themselves by private insurance	236
Voluntary insurance incomplete	236
Voluntary assessment beneficial societies financially unsound	238
Cost of private insurance in small amounts high	239
System can sell insurance at cost	239
Life insurance for man without dependents an unnecessary expense—The Widows' and Orphans' Fund	240
The differences in the interest of different employees in a widows' and orphans' fund	240
Premium variation to offset differences probably impossible	241
A flexible benefit necessary	242
The amount of the benefit	243
Two classes of benefits described	243
The return of contributions	244
A special life insurance benefit	246
The amount of special benefit in relation to salary	246
The types described	246
Amount entirely independent of salary:	
The discretionary amount	247
The sum based on number of dependents	247
The fixed amount	248
The amount a fixed annual premium will purchase	249
Amount a fixed proportion of salary	249
Amount indirectly dependent on salary	249
The unit system	250
The amount of the special benefit in relation to length of service	250
The nature of the benefit based on length of service	250
Social objections to benefits based on length of service	251
The amount of the special benefit in relation to the economic needs of the employee	252
Two important points for consideration	252

CONTENTS

	PAGE
Necessity for preservation of flexibility	254
Methods of preserving flexibility	254
The cost of the special insurance benefit	255
The contributory vs. the non-contributory system for special death benefits	256
Special reasons why employees should bear costs	256
Optional benefits	256
Return of contributions on withdrawal	257
Adjustment to other benefits	257
The term of the insurance	257
The disabled employee	258
Summary	259

CHAPTER IX

A BENEFIT IN EVENT OF DEATH IN THE ACTIVE SERVICE, DEATH THE DIRECT RESULT OF THE ACTUAL PERFORMANCE OF DUTY

The interests of the three parties in the benefit	261
The government	261
The employees	262
The public	263
Correlation with systems dealing with private employments	263
The conditions upon which granted	264
The amount of benefit in its relation to salary	264
Types to be considered	264
The amount entirely independent of salary:	
The discretionary sum	265
The sum based on the number and class of dependents	265
The special damage basis of award	265
Actual dependency the criterion of special damage	266
Family awards vs. individual awards	267
The fixed sum regardless of dependents	268
The fixed proportion of salary	268
Payment of cost of benefit in a single premium	269
The amount of benefit in relation to economic need of employees	269
Benefit non-contributory	271

CHAPTER X

A BENEFIT IN EVENT OF DEATH AFTER RETIREMENT

The nature of the problem	273
Origin	273
Division of subject	273
Death after superannuation retirement	274
The interest of the parties	274
Optional settlements	274
The settlements described	274
Factors affecting amount of benefit	275
Objections to optional settlements	276

CONTENTS

	PAGE
Death after disability retirement from ordinary causes	277
Death after disability retirement; both disability and death due to the actual performance of duty	278

CHAPTER XI

THE EMPLOYEE WHO BECOMES INEFFICIENT FROM CAUSES OTHER THAN ACCIDENT, DISEASE OR OLD AGE

The problem	280
Solutions attempted	280
Objections to solutions	281
Return of contributions maximum benefit	281

CHAPTER XII

A BENEFIT IN THE EVENT OF THE ABOLITION OF POSITION OR RE- ORGANIZATION OF OFFICE

The problem	283
The argument for a special benefit	283
The English experience	284
The solution by transfers	286
Actuarial difficulties of special benefits	287
The conclusion against a special benefit	288

CHAPTER XIII

THE PRESENT EMPLOYEES

Scope of the Chapter	289
Differences between present employees and future entrants	290
The differences enumerated	290
Differences in homogeneity	290
Differences in economic relation to retirement system	291
Differences in period of social evolution	294
Differences in desires for benefits	295
Differences in ability to provide benefits	296
Differences in susceptibility to moral injury	299
Necessary division of the present employees into classes	300
The present employees who will be retired upon the adoption of the system	301
The contingencies to be covered	301
The superannuation benefit	302
The cost of the benefit	302
Division of the cost	303
The conditions upon which granted	303
The amount of benefit	304
In relation to salary	304

CONTENTS

	PAGE
In relation to service	306
In relation to economic need	307
Employees continued after adoption of system: Benefits for	
past services	308
The contingencies to be covered	308
The superannuation benefit	308
The cost of the benefit	308
The division of the cost	309
The conditions upon which granted	310
The progressively diminishing superannuation age	310
The amount of the benefit	311
In relation to salary	311
In relation to length of service	313
Treatment of early entrants	313
In relation to economic need	315
The disability benefit	316
The cost of the benefit	316
The conditions upon which granted	316
The amount of the benefit	317
Employees continued after adoption of system: Benefits for	
future services	318
The contingencies to be covered	318
The superannuation benefit	319
The cost and its distribution	319
The conditions upon which granted	321
The amount of the benefit	321
The disability benefit	322
The benefit in event of withdrawal	322
The benefit in event of death	322
Summary of important points	322

CHAPTER XIV

THE ACTUARIAL RESERVE PLAN

vs.

THE ASSESSMENT OR CASH DISBURSEMENT PLAN

The differences between the two	325
The two plans described	325
Important differences	325
In respect to the taxpayers who bear burden	325
In respect to burden borne by interest	326
In respect to the proportion between salaries and benefit payments	326
The disguised assessment or cash disbursement plan	326
The history of disguised assessment schemes	326
How distinguished from real actuarial reserve systems	327

CONTENTS

	PAGE
The merits and defects of the assessment or cash disbursement plans	328
The two merits: Simple and safe	328
The four defects	329
Unbusinesslike and conducive to extravagance	329
The "paper fund" method of overcoming the objection	329
Liability to popular misunderstanding and attack	330
The argument that the cost is the same under either system	330
The weight of the argument	332
Inequitable as between successive generations of taxpayers	333
Not adaptable	333
The merits and defects of the actuarial reserve system	334
The four merits	334
The defects can be overcome	335

CHAPTER XV

THE ESTABLISHMENT AND OPERATION OF A RETIREMENT SYSTEM ON THE ACTUARIAL RESERVE BASIS GENERALLY DESCRIBED

The scope of the chapter	338
Question of operation on this basis independent of who pays the cost	339
Requires the services of an actuary	340
Planning a Retirement System	341
Representation of the parties	341
Division of employees into classes	341
Referendum votes	341
Position of the actuary	342
Establishing the system	343
Work of the actuary in developing premium rates	343
Four processes involved enumerated	343
Determining the forces on which cost depend	344
The measurement of these forces	345
The rate of withdrawal	345
The rate of salary change	345
Development of experience rates	346
Graduating rates	347
The service tables	348
Developing money values	348
Importance of devising economical system of records	349
Necessity for collecting data for each system	349
Necessity for conservative assumptions	352
Actuarial valuations of established funds	353
The necessity for valuations	353
The nature of the work	353
The actuarial balance sheet	354
The new schedule of premiums and benefits	354
How often necessary	355

CONTENTS

CHAPTER XVI

THE ACTUARIAL DEFICIT CREATED WHEN A NEW SYSTEM PROMISES BENEFITS TO PRESENT EMPLOYEES FOR PAST SERVICES

	PAGE
The origin of the deficit	356
Effect of ignoring the deficit	356
Methods of financing the deficit	358
Creating a perpetuity	359
Payment by installments	360

CHAPTER XVII

SYSTEMS TOO SMALL TO BE CONDUCTED ON ACTUARIAL RESERVE BASIS

Scope for law of averages required	363
Why necessary	363
Number necessary	363
Methods of Securing Numbers	364
Centralized systems	364
Advantages of centralized systems	364
Equality of the local participants	365
Resort to private insurance organizations	367
Necessity for service	367
Old age annuities	367
Death benefits	368
The federated universities of England scheme	368
Objections to private insurance companies	369

CHAPTER XVIII

CERTAIN COMMON PRACTICES IN FINANCING A FUND THAT ARE OBJECTIONABLE

The practices described	371
The objections to the practices	371
The rule	373

CHAPTER XIX

PROTECTING THE PUBLIC FROM FINANCIAL INDISCRETION OF RETIRED EMPLOYEES

Necessity for Protection	374
General provisions for protection	374
Payments in annuities: Funds free from attachment	374
Exception in case of resignation and dismissal	376
Exception in case of large annuities	376
Exception in case of death benefits	377

CONTENTS

	PAGE
Borrowing from the fund	378
Without security	378
With security	379

CHAPTER XX

CONCLUSIONS

The scope of the chapter	381
A retirement system necessary	382
No model system universally applicable	385
System must be applicable to future entrants	386
Benefits part of compensation for future entrants	387
Benefits must meet employee's needs	388
The contingencies to be covered	389
The conditions upon which benefits are to be granted	393
Benefits to be granted as rights	393
The superannuation benefit	394
Compulsory retirement provision necessary	394
A permissive superannuation age below the compulsory age	396
Superannuation conditions to be based on age	396
The exact ages to be selected	397
The disability benefit	400
The amount of the benefit	402
Not to be discretionary	402
The superannuation benefit	402
In relation to salary	403
In relation to length of service	410
In relation to economic need	415
The disability benefit	416
The withdrawal benefit	419
The benefit in event of death in the active service	421
The benefit in event of death after retirement	423
The benefit in event of death or disability in the actual per- formance of duty	423
The cost of the retirement system	426
The aggregate cost	426
The distribution of cost among individuals	428
The division of cost between government and employees	429
Indirect contributions by the government	432
The organization and management of the fund	434
The actuarial reserve fund preferred	434
Necessary safeguards	436
An actuary required	436
Treatment of small services	437
Indirect appropriations undesirable	439
Protecting system from financial indiscretion of employees	439
The present employees	439
Six differences between present employees and future entrants	440
Present employees must be specially provided for	445

CONTENTS

	PAGE
Different classes of present employees	445
Benefits in respect to past services: Employees continued in active service	447
Benefits for future services of present employees	448
The actuarial deficit on creating a system	449

APPENDIX

Bibliography	451
Index	465

**PRINCIPLES GOVERNING THE
RETIREMENT OF PUBLIC EMPLOYEES**

PRINCIPLES GOVERNING THE RETIREMENT OF PUBLIC EMPLOYEES

CHAPTER I

THE OBJECTS SOUGHT IN ESTABLISHING A RETIREMENT SYSTEM

Three Parties to System. The Object Sought by the Government. The Elimination of the Superannuated. The Elimination of the Disabled. Improvement of Morale. Retention of Men Now Lost. Attracting Men to the Service. Improvement of Staff Sole Object of Government. *The Objects Sought by the Employees.* Future Entrants vs. Present Employees. Future Entrants to be Considered in Devising Permanent System. The Point of View of Future Entrants. *The Objects Sought by the Public. The Objections to the Establishment of a Retirement System.* Objections of Employees to Compulsory Features. Five Objections Raised by the Public. *Summary.*

THREE PARTIES TO SYSTEM

Three distinct parties are concerned in considering the question of a retirement system for public employees, namely, the government, in its capacity as an employer; the employees themselves; and the general public. The public is involved not alone as the body that supports and controls the government and whose servant the government is, but also as the arbiter of public morals and social ethics. The interests of these three parties in a retirement system and the objects which they seek through its establishment are by no means identical. The ideal system, if such a thing exists, is not necessarily in all respects perfectly satisfactory to any one party, but is the result of an equitable compromise among the three which will meet the approval of an enlightened public in its capacity of arbiter.

RETIREMENT OF PUBLIC EMPLOYEES

The general objects and interests of these three parties must, therefore, be clearly understood at the outset, so that the myriad details involved in such a system may be viewed with perspective and so that a decision may be reached on that fundamental question, "Is a retirement system desirable?"

The Order
of Consid-
eration

The logical order for considering the interests and objects of the different parties would doubtless be to take up first those of the public and then those of the government and of its employees, since the public is the most general and the most important party. The order here followed, however, is to consider the government first, then the employees and finally the public, not at all from an unwillingness to recognize the obvious principle that the broad interests and objects of the public are dominant and must in the end prevail, but from a feeling that the subject may be more simply presented by following the natural or historical line of development. The need for a retirement system first becomes apparent to the immediate parties, the government administrators and the public employees, and one or the other secures the establishment of a system by the legislature. Sometimes the two act together. In the earlier days legislatures apparently regarded the question mainly as one of administration or of finance and gave little attention to its broad aspects as it involved the public. Systems planned by administrators not infrequently have been adopted with a narrow conception of wherein lay the real interests of the government and of the employees and have ultimately engendered friction between the two. Sometimes systems adopted at the instigation of the employees have been narrowly conceived and have been unjust alike to the government and the newer employees, and again friction has developed. Issues have thus been joined between the government administrators, on one hand, and the employees on the other; and on these issues the people through their legislative agencies have been asked to pass. By considering first the objects of the government and then those of the employees, the nature of these issues develops naturally, and the position of the public

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

as a whole becomes so obvious that it can be expressed in a few words.

After the general objects sought by each of the three parties have been considered attention can be given to the specific objections that have been urged against retirement legislation.

THE OBJECTS SOUGHT BY THE GOVERNMENT

The objects which the government seeks to attain through the establishment of a retirement system may be briefly enumerated as follows: (1) the elimination from its active force of those who have lost their efficiency because of advancing age or long service; (2) the elimination of those who have lost their efficiency in earlier life because of accident or disease; (3) the improvement of the morale of the remainder; (4) the retention in the service of the best of its present employees, many of whom in the absence of such a system resign to accept positions elsewhere; and (5) the attraction to the service of a higher grade of men. These objects, which are closely interrelated and may properly be included under the one head, the improvement of the personnel, require separate consideration.

The Objects
Enumerated

The Elimination of the Superannuated. That in the public service some fair and decent method of providing for the employee who has lost his efficiency because of advancing age and long service is necessary is the almost universal opinion of persons who have had experience in governmental administration. They have reached this opinion not so much from any feeling of sympathy and pity that they may have for the elderly, enfeebled employee, as from the desire to remedy the existing situation and to develop an active, capable force.¹

¹For a collection of statements by American administrative officials, see "Retirement from the Classified Civil Service of Superannuated Employees," a report by the Commission on Economy and Efficiency, Washington (1912), House Document 732, 62d Congress, 2d Session, pp. 7-13, and "Savings and Annuities Plan Proposed for

RETIREMENT OF PUBLIC EMPLOYEES

The Situation in the
Absence of
a System

The usual situation in the absence of an adequate retirement system legally established is that the superannuated man is continued on the payroll so long as he can fulfill the minimum attendance requirements. Such a procedure is almost inevitable from the very nature of government service. No administrative officer has a financial interest in the business of his office. Any expense involved in exercising the natural instincts of human kindness by keeping an old man in the service does not fall on the administrator personally; it is borne by the taxpayers and they are far removed. Their chances of finding out about any individual case and raising a question are so remote that the thought of difficulty on that score probably never enters the administrator's head. On the other hand, he generally knows that the aged employee has many friends and acquaintances in the office force, even if he and the aged employee are not bound by those ties that arise from long association in the public service. All know something of the family affairs of the man, of the plans that would have to be sacrificed and of the changes that would have to be made if dismissal should come. Sometimes everyone realizes that it would mean absolute want. The administrator, therefore, can safely assume that, if he should overcome his own inclination to take no action, office opinion would be against him and he would endanger the spirit of his force. He could count on an attack from friends and acquaintances of the employee both in and out of the service, and he would be fortunate if he escaped political pressure and possibly newspaper notoriety. He knows that inefficiency is difficult to prove, whereas dismissal of an old man without provision cannot be hidden. In the vast majority of cases almost all the

Retirement of Superannuated Civil Service Employees," by Herbert D. Brown, Senate Document, No. 745, 61st Congress, 3d Session, reprinted as Appendix A of above-mentioned report of the Economy Commission, pp. 14-27. See also report of Massachusetts Pension Commission, Massachusetts House Document 2450, Boston (1914), p. 183; and "Report on the Organization of the Public Service of Canada," by Sir George Murray, 3 George V, Sessional Paper 57 a-1913, Ottawa (1912), p. 18.

forces at work dictate obedience to the unwritten law of permanency of tenure so long as the man can be at his place for the minimum time required.

An attempt has sometimes been made to determine the cost of this inadequate and informal quasi-benefit system which provides for carrying the superannuated employee on the active rolls so long as he is able to report for duty, but does nothing for him if his ability to report for duty fails. The procedure has been to secure reports from the responsible administrative officers showing what proportion of the salaries being paid the elderly employees is actually earned. The difference thus found between the salaries paid and the amounts actually earned is properly chargeable as a loss due to such a system, but it by no means measures the entire cost.²

The Cost of
Super-
annuation

To measure the loss that results to a government when a superannuated employee is retained in a position of responsibility is beyond the province of statistics. A physician who is responsible for the maintenance of public health, and yet is so far broken that his administrative superiors are forced to admit that he is only earning half his salary, may occasion a loss that cannot be reckoned in figures.³ Figures cannot measure the damage that may be done by a school teacher whose powers have appreciably failed.⁴ Men who are the directing heads of large governmental undertakings may themselves become superannuated. Naturally in making reports on impairments due to age, they do not realize that they them-

² The United States Commission on Economy and Efficiency made a very careful study on this basis. See "Retirement from the Classified Civil Service of Superannuated Employees," Report to the President on Retirement Allowances, Washington (1912), House Document 732, 62 Congress, 2d Session, pp. 37-45.

³ The question of superannuated public physicians was presented before the Committee on the Union Officers' Superannuation (Ireland) Bill. British Parliamentary papers (1882), Vol. XIII. See Questions 718, 719 and 903; also memorandum on p. 96.

⁴ For a discussion of the effect of a retirement system on the efficiency of a school system, see "Teachers' Pension Systems in Great Britain," by Raymond W. Sies, U. S. Bureau of Education, Washington (1913) pam. 544.

RETIREMENT OF PUBLIC EMPLOYEES

selves are not earning their salaries; far less do they realize that the losses due to their superannuation may approach and in some cases even exceed the total appropriation made for the undertaking of which their position automatically gives them control. The aged administrator who sticks religiously and obstinately to the methods which were in vogue when he first entered the service regardless of the great progress in mechanical devices and office aids in the last two decades, is by no means unknown to government services. Losses from such sources might easily make the losses as measured by amount of salary unearned seem insignificant.⁵

Choking
Avenues of
Advance-
ment

Permitting superannuated employees to occupy the more important positions has another bad effect, the cost of which cannot be determined. Even in offices where promotions are made in theory solely upon merit, without regard to length of service, length of service does, as a matter of fact, enter into the selections. If an administrative officer has an opportunity to make a promotion to a vacancy, and one candidate is a comparatively new man of great promise who has already received rapid advancement and the other is a man with an excellent record for long and faithful though not brilliant service, the decision is not infrequently in favor of the older man. In some offices, of course, seniority alone is practically the determining factor. As the office grows older the attractive middle grade positions carrying the higher salaries and the larger opportunities to do things become filled with men of long service, of fairly advanced age, and perhaps of mediocre ability, who have not been drawn off by outside offers. Unless the office is expanding and the number of positions increasing, the younger men of ability, coming in at the bottom, are discouraged by the remoteness of the chances of advancement,

⁵ "The evil consequences of retaining a single civil servant in an important post for which he has become incompetent cannot be estimated in money and may be much more than an equivalent for the expense of the superannuation of a whole department." Report of the Commissioners on the Operation of the Superannuation Act, p. XI, British Parliamentary papers, London (1857), Vol. XXIV.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

and resign as soon as opportunity offers. In some offices this process may be carried so far that when vacancies occur near the top no properly qualified experienced men are available to take them and they go more or less by default to older men of mediocre ability who have secured advancement to the middle grade positions largely on the basis of faithful service and seniority. If the duties of the office are mere matters of routine administration, the resulting loss may be scarcely appreciable, provided the force was well organized at the outset; but if the value of the services performed is largely, if not entirely, dependent on the initiative and force of the leading officials, this system of permitting the avenues of advancement to become choked with elderly men who, although entirely worthy, have not the capacity for leadership, represents a loss that may be equivalent to almost complete atrophy.⁶

The failure of the public service to attract and hold the more ambitious and energetic men is a loss which is to some degree attributable to the absence of an adequate retirement system. Though this loss is perhaps mainly due to the disparity between the financial rewards offered in public as contrasted with private service and the practice of reserving many of the higher positions as political plums for the deserving, yet it is also due in part to the remoteness of the prospects which a new entrant has of reaching the higher positions, which give a kind of reward—not found in most private service—that in some foreign countries has been more than sufficient to offset differences in pecuniary gain. By retiring the aged employees, the chances of promotion are, of course, enormously increased, for the employees of advanced age are generally fairly high up and a single resignation at the top frequently means advancement all down the line. A good prospect of advancement is, of course, in many cases more potent

⁶ See Report of the Secretary of Commerce and Labor for 1912, Washington (1913), p. 37, quoted in the 29th Report of the United States Civil Service Commission, Washington (1913), p. 204, for an instance of such a situation.

RETIREMENT OF PUBLIC EMPLOYEES

in attracting and retaining men than the immediate salary; and, in the absence of a retirement system, the prospects of advancement in the public service are frequently summarized, somewhat inaccurately, in the familiar governmental proverb, "Few die and none resign"—inaccurately because resignations among comparatively new entrants, discouraged by their prospects, are all too common.⁷

The Moral
Effect of
Retaining
the Super-
annuated

The effect of the retention of a superannuated employee on the morale of a force is a difficult thing to gauge. If the employee occupies a routine position, his fellow employees may close ranks about him and carry his load for him in such a way that the public in reality suffers little loss. At the other extreme are the cases where the superannuated man is in a position requiring leadership. Employees cannot work effectively if they generally believe that a modern device or a new method would do what they are doing in a fraction of the time, nor can they be enthusiastic if they believe that their official leader is far behind the progress of evolution in his field. With confidence in the usefulness and economy of their work gone, employees easily fall into what has been termed the "government stroke."⁸ Between these two extremes of the superannuated man in a subordinate position and the

⁷ "Young men now entering the service with little assurance for their future look rather to acquiring some outside profession or business, and they do not have the same motives of devotion to good service that govern in outside employment. They may lose their salary at a time of life when the avenues of outside employment may be closed to them, no matter how long or faithfully they may have labored in the public services. They are thus on the alert for other employment which will enable them to better their future condition. Few of the young men now entering the service do so with a definite intention of remaining in it permanently or of making it a career. It is accepted as a make-shift while preparing for a profession or looking for other employment."—20th Report, United States Civil Service Commission, Washington (1904), p. 155.

⁸ Superannuation is not, of course, the sole cause of "government stroke" where it develops; other factors such as a distinctly political administration of an office or political interference in administration or favoritism are at times direct causes. In order to get efficient work the general belief in the office must be that the merit system is a reality and not a sham.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

superannuated man in a responsible position are innumerable degrees of difference, but in most cases a considerable element of loss to the public is involved.

Stagnation in promotions has, of course, an effect on the morale of the force, and, in so far as the absence of a retirement system for superannuated employees causes stagnation, it operates against effectiveness.

To overemphasize the importance of preserving the morale of a public force is almost impossible. In a private commercial enterprise where the power of appointment and removal can be safely vested in a responsible head whose efficiency can be measured by concrete results, the employees can, by a certain type of pressure, be kept up to a given standard; but in a government service, where the power of appointment and dismissal has to be restricted and where the motives that lead administrators to exert that type of pressure are largely lacking, high standards are to be maintained more through hope of advancement than through compulsion. In many branches of governmental work, especially those involving the exercise of professional qualifications, the mere suggestion of compulsion is ridiculous. The public service must be so organized that it appeals directly to those motives that lead individual men to work without driving.⁹

⁹ "To be conducted successfully, its [the Government's] rewards must appeal to the motives which compel able men to put forth their best effort. The opportunity for a stable career and the assurance of a pecuniary return which will meet the demands of a reasonable standard of living in view of the position held and the service rendered and will remove the fear of dependency upon others when advancing years have diminished, or it may be, altogether destroyed, the capacity for work, are the inducements which our great business corporations have been finding it more and more necessary to hold out, if they wish to attain large success. The government must offer the same inducements if it would secure the same grade of service.

"That such inducements are not now offered by the government is sufficiently well known. The unambitious, the timid, the mediocre, once in the government's employ are reasonably sure to remain until forced out; but it is increasingly difficult to retain in the government's administrative services competent men of initiative and force. Meanwhile, the demand for the undertaking by the government of new

RETIREMENT OF PUBLIC EMPLOYEES

Suggested Substitutes for Super- annuation Retirement System

Numerous substitutes for a superannuation retirement system have been suggested from time to time by some who have recognized that the practice of retaining aged employees in the active service after their powers have begun to fail results in a large but immeasurable waste. Among these may be mentioned (1) requiring all to retire at a fixed age without any retirement allowance; (2) requiring the dismissal each year of a certain percentage of the employees; (3) establishing fixed terms of office with or without the privilege of reappointment; (4) establishing an adequate system of efficiency ratings and requiring all to be dismissed who fall below a given standard and (5) abolishing the merit system. That each of these proposed remedies has great defects is apparent on brief consideration.¹⁰

A Fixed Age of Dismissal

If all the employees above a certain age in any federal, state, county, or municipal government should suddenly be required to resign without regard to their efficiency, two things might reasonably be expected to happen. First, the remaining employees who could secure other positions outside the service would do so and those who could not would be thoroughly dissatisfied. Second, the public sense of decency and fitness would be outraged. To meet a popular demand, roused by the appeal made by certain individual cases, reinstatements would be made wholesale or else the legislative body would adopt some hasty, ill-considered pension legislation.

Annual Dismissal of a Fixed Percentage of Em- ployees

The complete demoralization that would result from a provision for the dismissal of a certain percentage of employees

administrative tasks is constantly more insistent and there is a never-ceasing growth of its administrative departments already established. There is a supreme need of organizing the civil service of the government upon a sound and lasting business basis, if it is to meet adequately not merely the needs of the present, but the still greater future needs which even now can be plainly foreseen."—"Civil Pensions for Federal Employees," National Civil Service Reform Association, New York, 1909, p. 5.

¹⁰ Nineteenth Report of the United States Civil Service Commission, Washington (1903), p. 26, and "Superannuation in the Civil Service."—Report of a special committee of the National Civil Service Reform League, New York (?), 1901, p. 5.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

each year can scarcely be imagined. Many employees would spend more time in seeing that their names were not on the list to go than they would in doing their work. Administrative officers would devote their days to dealing with those forces which are generally grouped under the term "influence." Independent, self-respecting men would leave the service for positions in private life where no such conditions are imposed, and the class of persons willing to accept government employment would be distinctly inferior.

Even worse is the suggestion of a fixed term of office with or without the privilege of reappointment. No business man would for a moment consider limiting each employee to a fixed term. Stability of the force, with minimum costs for training new men and maximum development of that judgment which comes from long experience in the work is what large corporations seek, especially in those departments of their undertakings which most resemble public service. If the privilege of reappointment were granted, it would be necessary to throw even greater weight on not altogether satisfactory civil service examinations or to revert practically to the spoils system. That the highest type of men now secured for the public service would compete for positions on such terms is scarcely imaginable; the permanency of tenure and the general conditions of the service are the forces which enable the public to secure such men at salaries that are frequently considerably lower than those paid for similar services in private enterprises. A fixed term of service would in all probability result in an immediate deterioration of the force.

A Fixed
Term of
Office

An adequate system of efficiency ratings with compulsory retirement for those who fall below a given standard is an excellent provision, theoretically. To anyone who has honestly struggled with the problem of adequate efficiency ratings in the public service, its impracticability is apparent. Though such ratings honestly made are of great administrative assistance and should be developed to a far greater extent than at present, they could scarcely meet the strain that it is suggested

A System
of Efficiency
Rating

RETIREMENT OF PUBLIC EMPLOYEES

to put upon them. They depend fundamentally on the judgment of the administrative officer who makes the report, for in few cases can he determine accurately the quantity and quality of an employee's work. A retirement system based on efficiency ratings would be adopted on the assumption that an administrator who will not take the initiative in recommending a dismissal will place on an efficiency report a judgment rating which means dismissal. It is an unwarranted assumption, because the new system makes no change in the fundamental forces that are in operation, but merely a change in the form. Perhaps an administrator would occasionally be found who would feel an added responsibility because he had to sign or initial an efficiency report, but the great majority would give the inefficient old men the passing grade and would, if anything, sleep the more soundly for it. To get honest efficiency ratings that depend on judgment—of course, dishonest ones are of no utility whatsoever—the person who makes the report must know that employees recorded as having fallen below the required standard through old age or misfortune will be treated with consideration, and that in such cases excellent or good past records will excuse present shortcomings. Feeling assured of this fact, he will submit reports which are of real value in making promotions, in taking minor disciplinary action, and in general administration, but if he is not so assured, the efficiency rating system may in many instances degenerate into another piece of formal red tape.¹¹

¹¹ The United States Department of Commerce and Labor made a careful set of efficiency ratings in 1909. In passing on these ratings, one of the decisions reached was "That due consideration should be given to the cases of veterans and those who have become more or less incapacitated for duty through long and faithful service."—Report of Secretary of Commerce and Labor, 1909, p. 68, Washington, 1910, quoted in 26th Report of the United States Civil Service Commission, Washington, 1910, p. 141.

The United States Commission on Economy and Efficiency made the investigation into the loss through superannuation (mentioned in note 1, p. 63) entirely impersonal, but it says, "The commission is convinced, however, that the officers making the reports were still reluctant to turn in schedules that rated anyone as notably inefficient," p. 38.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

The suggestion of a return to the spoils system is mentioned merely for completeness. Opponents of civil service reform often take pleasure in attributing all superannuation in the public service to the introduction of the merit system of selecting persons for appointment. Obviously the method of selecting employees has nothing to do with the superannuation problem, except in so far as civil service regulations may set up maximum ages above which candidates will not be examined, limitations which probably did not have their counterpart under the spoils system. Superannuation is the inevitable outcome of reasonable permanency of tenure, regardless of how the appointments are originally made. England had the superannuation problem long before it had a system of civil service examinations; in fact, the first requirement that new entrants to the English service should have a civil service certificate was contained in an act modifying the English retirement system, which had then been in formal operation for almost half a century.¹² Unless permanency of tenure is sacrificed, no reversion to an inferior method of selection for appointment can eliminate superannuation, and reasonable permanency of tenure is necessary if promising men are to be secured when young and trained for their positions so that the public may have the benefit of that expert service which comes mainly from proper training and long experience.

Return to
Spoils
System

The Elimination of the Disabled. The administrative problems raised by the absence of any suitable system for retiring employees who have lost their efficiency in the earlier years of life, as the result of accident or disease, are in many ways similar to those involved by lack of provision for the superannuated. The employee who has been disabled in early life is, if anything, more likely to excite the sympathy and compassion of his fellow employees and is less likely to have means of providing for himself and his dependents if dismissed. His

Nature of
Problem

¹² First Report of Royal Commission on Civil Establishments, British Parliamentary Papers, 1887, Vol. XIX, p. 422, London, 1887.

RETIREMENT OF PUBLIC EMPLOYEES

children, if he has any, are likely to be younger and less capable of assisting in the support of the family. If, therefore, the disability does not prevent mere attendance and an appearance of performing some duties, the chances of retention in the service through compassion are great.

he Loss
due to
disability

The losses occasioned the government through disability are undoubtedly less than through superannuation, because disability resulting from accident or disease is generally less frequent and the employee is less likely to have attained a position where his inefficiency causes large indirect wastes. The presence of disabled employees in the active service does, however, affect the morale of the force. To distinguish between inefficiency that is due to accident or disease and inefficiency that is due to an aversion to work is not always easy, and may even puzzle experienced physicians. Natural shirkers and discontented employees may, therefore, take advantage of the pace set by superannuated minor employees and the disabled, and the administrator will have difficulty in applying disciplinary measures. They do not press for a proper medical examination to determine exact conditions of the unsatisfactory employee, because, if the report should be that he is mentally or physically incapacitated, they have no adequate means of meeting the situation. They must either keep him or dismiss him. They do not want to dismiss the employee if it means want for him and his family, and they cannot very well keep him if they have asked an examination because of the man's inefficiency and have a formal report that it is due to physical or mental impairment. The general practice may safely be said to be to leave the employee unmolested and to reduce the evil in so far as is possible through the imperfect means at the administrator's disposal.

Effect of
system

Improvement of Morale. Improvement in the morale of the force will naturally result from increasing the opportunities for advancement in salary and in authority and responsibility. Under an adequate retirement system persons with capacity

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

for leadership will be more generally retained in the service and will reach the higher positions while still in the prime of life and will leave them when their powers begin to fail. The general rapidity of the work will be increased, because those who are excusably slow from old age or disability will be more generally eliminated; the others will have more inducement to exert themselves on account of the greater chance of winning some reward, and the few who are inefficient entirely from their own fault can be dealt with through the establishment of adequate efficiency ratings and suitable penalties uniformly enforced. The chances will perhaps be greater to raise in the force the enthusiasm of accomplishment.

Retention of Men Now Lost. Retention in the service of some of the men who now leave will naturally result from the improvement in their chances to advance and from the assurance given them, through the retirement system that they, and probably those dependent upon them, will not be left in want in the event of disability resulting from sickness, accident or old age. Sometimes a retirement system provides an actual financial loss in event of resignation, and such a provision has its firm advocates, but a consideration of its merits and defects is a subject in itself.¹³ Whatever the provision on this point, the general effect of a satisfactory retirement system is to improve the conditions of service and make those in it more willing to stay.

Attracting Men to the Service. The general effect of a retirement system in attracting men to the public service is probably somewhat overstated. The general testimony among English public servants of various classes is that the new entrant is chiefly concerned with the amount of the immediate wage and does not begin to attach importance to the provisions of the retirement system until he has been in the service some time and has assumed the responsibilities of family life. Then,

¹³ See Chapter VII, p. 216, on a benefit in the event of withdrawal.

RETIREMENT OF PUBLIC EMPLOYEES

according to the evidence, he probably attaches a greater importance to the benefits under the system than their money value warrants. Occasionally in the numerous reports of parliamentary committees and royal commissions one will find, however, an employee who testifies not only that the retirement system was an attraction to him, but that it was his chief reason for entering the service. It would seem entirely reasonable to suppose that with the spread of movements toward vocational guidance and the increased tendency to judge a chance more by the future it offers than by the immediate wage, the government could, by a resort to suitable avenues of publicity, make the fact that it had an adequate and equitable retirement system prove a markedly attractive feature.¹⁴

Employees
Not Specially
Privileged
Class

Improvement of Staff Sole Object of Government. Every reason for establishing a retirement system thus far advanced can be summarized under the single broad heading of the improvement of the public service, and, in fact, that is the only reason why the government should establish one in its own interests. Sentimental arguments are sometimes advanced to prove that the government owes some special charity to the man who has grown gray in its service. The right of a government benevolently to give unearned gratuities to a selected class of the public not economically dependent and not properly wards of the state is not only of doubtful constitutionality,¹⁵ but of doubtful economic and social expediency. The government employees are not members of a specially

¹⁴ The Massachusetts Pension Commission reported, "The attraction of a better class of employees by reason of a pension is an unknown quantity, if it exists at all, and to justify the cost of a pension system on such an unknown factor would be illogical and unwarranted."—Massachusetts House Document, No. 2450, p. 182, Boston, 1914.

¹⁵ For a discussion of the legality of state contributions to retirement systems in Massachusetts, see Report of the Commission on Pensions, House Document, No. 2450, Boston, 1914, pp. 177-179. See also article by Dr. Frank J. Goodnow in *American Political Science Review*, May, 1911, on constitutionality of old-age pensions not based on need of poor relief.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

privileged class. They are no more entitled to public charity and benevolence than men who have grown gray in serving the public in some private capacity.¹⁶ Public contributions to a retirement system are to be justified not on any ground of benevolence or philanthropy, but on the ground that they are payments to improve the character of the service and that, in so far as new entrants are concerned, the rights arising under the system are part of the compensation, paid in that form because experience has demonstrated that such a method of payment facilitates maintaining the force in a state of efficiency. Payments to employees already in the service may be justified on the ground that they are in the nature of compensation for depriving the employees of that prospect of retention in the active service, in event of disability from sickness, accident or old age, which was theirs on entering the service and which under the term "permanency of tenure" or "steadiness of employment" may have been one of the inducements to enter. In so far as the government consults its own interests alone, it establishes a retirement system purely as a business expedient to get better service.¹⁷

THE OBJECTS SOUGHT BY THE EMPLOYEES

Future Entrants vs. Present Employees. In considering the interests of public employees in the establishment of a retirement system, two distinct classes must be distinguished at the outset: (1) those who are already in the service and (2) those who will enter after the system is in operation. The interests of the two classes are radically different. The present employees are the survivors of a much larger number of original entrants, and their leaders, both officially and in their quasi-

The Differences Between the Two Classes

¹⁶ See "Teachers' Pensions in Great Britain," by Raymond W. Sies, United States Bureau of Education, Pamphlet 544, p. 74, Washington, 1913.

¹⁷ The National Civil Service Reform League considers that a retirement system can only be justified on the ground of increased efficiency. See their pamphlets, especially "Civil Pensions for Federal Employees," New York, 1909, p. 4.

official organizations, are generally the older employees. These leaders have, of course, escaped the danger of death in the early years of service and to a considerable extent the danger of disability that would necessitate resignation. They have usually become settled in their positions with little expectation of ever resigning to enter other occupations or, in the case of women, to marry. They have passed the period in which they could themselves contribute any material part of their own retirement allowance and the period in which their course of action in respect to remaining in the public service or resigning from it to accept other positions could be materially influenced by the establishment of a retirement system. To the oldest of the present employees the establishment of a retirement system by the government appeals as an act of grace, a benevolent award of just deserts for long and faithful service. To some extent the same attitude is held up by the other present employees, but the extent diminishes rapidly as the more recent appointees are approached. They have almost the same point of view of men who enter after the system is established.

To future entrants the system does not appeal as an act of grace; it is regarded as one of the inducements to enter the service and the prospective benefits are considered part of the compensation earned by services rendered. They have no compunctions about objecting to any features which they consider undesirable, because they will consistently refuse to regard any benefit under the system as a gracious gift.

One of the fundamental difficulties in the establishment of a retirement system has its origin in this marked difference in the attitude of the two classes of employees.¹⁸ The natural tendency in establishing a retirement system is to make it meet

Unfor-
tunate
Natural
Tendency
to Consider
Present
Employees
Only

¹⁸ For striking illustrations of these differences, see evidence in Report of Committee on the School Board, London Superannuation Bill, British Parliamentary Papers, 1890-91, Vol. XVII, London, 1891, and in Report of Committee on Teachers' Superannuation, British Parliamentary Papers, 1892, Vol. XII, London, 1892. These two reports give the proceedings preliminary to the establishment of the Elementary Teachers' Deferred Annuity Fund.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

only the needs of the present aged employees. They are the ones that the legislators and the administrators have in mind; they constitute the immediate superannuation problem. They and the others who are approaching advanced age are frequently the only employees who are actively and vitally interested in the establishment of the system. They are the officers and leading members of retirement associations and committees, if not of various other quasi-official organizations. They are active themselves, and they are not infrequently disturbed over the lack of interest of the younger employees. To the younger employee, retirement because of advanced age seems very remote, and generally he does not realize the numerous ramifications of a retirement system that vitally affect his interests. Unless a proposal is made to withhold something from his salary in the way of contributions, he is content to let the older employees get the system through, trusting that whatever is for the interest of the older employees is for his interest also. The position of the future entrant is naturally worse, for he is not yet in a position to be heard. Within a comparatively few years, however, the new entrants will make up the greater part of the service and within about eighty years the system will exist solely for them, yet the representatives of the employees that appear before the committees are generally men of long service well past middle age.

The results following this natural course of development are not infrequently disappointing if not disastrous. Future employees, after entering the service, find the system ill-adapted to their needs because it does not provide for the contingencies of life which they have to face. The older employees who secured the establishment of the system, or who were consulted in connection with its establishment, could not appreciate the attitude of new men toward a forfeiture of any rights in event of death, early disability or resignation, because they themselves had escaped those risks. To sacrifice all other benefits for a substantial benefit on retirement because of old age, with perhaps a little something if death came soon after re-

Bad Results
from
Following
Natural
Tendency

RETIREMENT OF PUBLIC EMPLOYEES

tirement, seemed to them all that was required by any employee, because it was all that they required. To the new employee death in the active service or early disability from disease are the immediate fears, and he does not want to protect himself against old age by sacrificing or curtailing his protection against what he considers his real dangers. Accordingly, he organizes associations and committees to demand the reform of the system.

Difficulty
of Reforming
System

Reforming a system is, if anything, more difficult and more contentious than establishing one in the first instance. Natural forces have preserved the conflict of interest between the older employees on the one hand, and the younger employees on the other, and, in addition, vested interests have arisen under the system first established. Each group now has an immediate concern in all the questions involved. A bitterness has been engendered in some reorganizations that has threatened the existence of those cordial relations between younger employees and older employees that are essential in the conduct of any public service. Pension legislation is not infrequently a perfect illustration of the legislative sins of the fathers visited upon the children unto the third and fourth generation.

The
Scientific
Method

Future Entrants to be Considered in Devising Permanent System. Obviously the scientific method of developing a retirement system is to consider the needs of the future employees and in so far as possible to meet them. In a comparatively short time the present employees of advanced age will have passed out of the service and any serious defects in the system from the point of view of new entrants will have begun to develop as grievances. The needs of future employees can be considered dispassionately. After a more or less ideal system for future entrants has been devised and established, a modification of it can be used temporarily to meet the requirements of present employees who cannot be fitted into the permanent system. This procedure requires forethought, but,

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

as in so many other cases, legislative forethought produces far better results than legislative afterthought. Throughout the principal part of the present volume, the discussion of the interests of the employees will be confined to the interests of employees who have entered after the system has been established. Toward the end of the volume a chapter is devoted entirely to the differences between the interests of the two classes and the modifications in a system that may be needed temporarily to make it meet the requirements of present employees.¹⁹

The Point of View of Future Entrants. The point of view of employees entering the service after the establishment of a retirement system and to a certain extent of the younger employees who were in the service at the time of establishment can, of course, be determined fairly accurately from the testimony given in connection with various reorganizations of retirement system that have taken place in Great Britain and Ireland. It would seem reasonable to suppose that public employees in this country will show at least as much understanding and independence in the event of reorganization as have the various classes of public servants in that country. Such an assumption seems well supported by the history of the New York school teachers' fund and by the differences that have arisen among employees of the federal government regarding the type of system they would have. The point of view of

Basis
for
Statements

¹⁹ "With regard to the adjustment of a sound scheme to the interests of the existing teachers, I have said that I think any scheme adopted should be drawn up so as to be just and sound for people coming in *de novo*: that is to say, *ab initio*. When you have matured that scheme, I think it would be fair to consider the question of giving some consideration to the existing teachers, whether board or voluntary, throughout the country; not of course to give them the full benefits to which persons are entitled who have contributed from the beginning, but something in the form of a compassionate allowance so as to adjust the transition from the old system without superannuation to the new system with superannuation."—Testimony before the Committee on the School Board, London Superannuation Bill, British Parliamentary Papers, 1890-91, Vol. XVII, London, 1891, p. 50, question 880.

RETIREMENT OF PUBLIC EMPLOYEES

future entrants may, perhaps, be fairly summarized as follows:

Compensa-
tions and
Not Charity

All rights and privileges under the system are in reality parts of the contract of employment and constitute part of the consideration offered to the employee by the government for his services.

The employee earns all he gets and the system involves no element of charity or philanthropy.²⁰

To request a change in the system is not to look a gift horse in the mouth. The retirement system is in many respects like any other part of the employment contract, wages, hours of work, or conditions of labor, and within certain limitations is open to discussion at any time.

²⁰ The following testimony given by a railway employee before the Board of Trade Committee on Railway Superannuation Funds (British Parliamentary Papers, 1911, Vol. XXIX, Pt. 1, p. 93, questions 2459 and 2460) is perhaps typical.

"The effect of a pension fund is that the company get the services of experienced and tested men at a smaller salary than if there had been no pension fund. Men are deterred from leaving the service on account of their prospective pensions. . . . If there had been no pensions to look forward to, of course the salaries would need to be higher. We consider that the salary and the pensions are the considerations for which we give our services and, of course, if we know we have a pension to look forward to, we are more content with a smaller salary. That is always taken into consideration and many of my acquaintances in the service have refused to leave the service, although they have been offered a larger salary, because of the prospective pension."

The following testimony of a government employee, given before the British Royal Commission on Superannuation and Civil Service (British Parliamentary Papers, 1903, Vol. XXXIII, p. 84, question 2334) is also fairly typical. "Now speaking, at any rate, personally for myself, I think there is a great deal of Phariseism in that, that the pension system arises out of the fact that the government authorities do not like to see their servants practically in the gutter in old age. I believe that not only the government services, but the great companies and others bring up these systems not from a point of view of charity at all, but simply to secure and retain the services of experienced servants and so far as a company may be said to contribute to such a fund, I most unhesitatingly assert that it is simply a portion of the man's wages paid year by year for a specific purpose: it is simply paid in another way."

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

The prudent, thrifty employee who is fortunate in escaping the dangers of life and is wise in his choice of investments could do better by taking the cost of the retirement system in wages or salary.

The retirement system should not protect the employees from one contingency of life by increasing their loss in the event of the happening of one of the other contingencies. The contingencies generally recognized are death, disability, old age, dismissal and, to a certain extent, voluntary resignation.

As a class the employees are inclined to accept tacitly that an adequate and equitable retirement system is for their best interests as a body. After a system has been established, generally through the activities of the older employees whose arguments in favor of it scarcely reflect at all the attitude of future employees, the members who appear before committees to testify regarding its operation are mainly concerned with objections to some particular details, and they rarely go into the question of the general merits of the idea as a whole. It is indeed significant that in the voluminous mass of evidence contained in the British parliamentary papers of the past century, during which time that country has frequently been concerned with the organization or reorganization of retirement systems for public servants of one class or another, no record was found, with a single unimportant exception,²¹ where any distinct body of employees preferred no retirement system

Positive
Advantage
to Em-
ployees

²¹ "At our asylums we have a number of artisans who, about five years ago, petitioned that they might be put entirely upon trades union rate of wages and the option was given to them, either to remain under the terms they were with pensions or to go at once to trade union terms and these four hundred men elected to have a larger immediate salary and forego all the rights to pension and sick pay and that kind of thing," Sir J. McDougall, of the London County Council, testifying before the British Royal Commission on Superannuation in the Civil Service, British Parliamentary Papers, 1903, Vol. XXXIII, p. 138, question 3817. For more details, see questions 3894 and 3910.

RETIREMENT OF PUBLIC EMPLOYEES

to any retirement system. The employees' arguments in favor of a retirement system may be pieced out from the evidence given in different connections somewhat in this way:

"The existence of a retirement system increases the opportunity for advancement and improves the general conditions of the service.

It causes us all to protect ourselves systematically, to a certain extent, against the happening of the principal danger of life, sometimes through the introduction of insurance against permanent disability, without which reasonable protection would be difficult to secure even through expensive private insurance.

Unless we had such a system, cases of improvidence, want and great suffering would occur among us or our families, as they did before the establishment of the system. These cases might arise because of death or total disability of the breadwinner occurring early in life before he had had opportunity to make provision or on the happening of the same events later, if the breadwinner was lacking in the virtue of thrift.

The incentives to save are not great in the public service. The employee has no chance to become a part owner in the business or to go into business for himself; his official and social position are determined more by the office he holds than the amount of his accumulations; and his security of tenure promotes a sense of general security.²²

Even if the employee has been thrifty, he may lose money through unwise investments because he is inexperienced in business transactions and has little opportunity to work with his own money, as many men in small businesses do.

²² For a discussion of the effect of the modern industrial system in diminishing the strength of the forces producing individual saving and thrift, see *Social Insurance*, by Henry R. Seager, Macmillan Company, New York, 1910, pp. 10 and 11.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

The retirement system frequently appeals to us particularly because it compels us to save and furnishes us with a safe investment, giving a reasonable return and practically perfect security."

THE OBJECTS SOUGHT BY THE PUBLIC

The advantages to the general public of a well-designed retirement system are that it improves the quality of the governmental service and provides support systematically not only for employees who through its provisions are eliminated from the service, but also for those employees who, even in the absence of a system, are forced to resign, sometimes in poverty, because accident, disease, or old age prevents them from fulfilling even the minimum requirements of their offices. To a limited extent, the system may even provide something for widows, orphans or other dependents in the event of death of the breadwinner. It is, therefore, a constructive social measure, because it tends toward greater stability and independence and reduces the need for public and private charity; and it does this by compelling the employees while possessed of full earning capacity to save part of their compensation for services rendered in order that they may be protected when their earning capacity fails.²³

²³ For a report which clearly recognizes the importance of the social aspects of a retirement system, see "Establishment of a Superannuation Fund for the Whole of the Government Service: Report of the Committee and of the Actuarial Sub-Committee," Sydney, New South Wales, 1912. Louis D. Brandeis has written:

"Given the status of employee for life and the need of an old age pension is obvious. The employee needs the pension because he cannot—or at least does not—provide adequately from his wages for the period of superannuation. The employers need a comprehensive pension system because while the presence of the superannuation employees in a business seriously impairs its efficiency, the dictates both of humanity and of policy prevent discharge unless their financial necessities are provided for. The demand for a pension system grows more pressing as businesses grow more stable; for in older businesses there is a constant tendency to accumulate superannuated employees. The demand becomes particularly acute when businesses grow large as well as old; for then it becomes difficult to provide for the individ-

RETIREMENT OF PUBLIC EMPLOYEES

THE OBJECTIONS TO THE ESTABLISHMENT OF A RETIREMENT SYSTEM

Objections to the establishment of a retirement system are raised, of course. From the point of view of the government as a large employer, they are directed against specific details of the scheme rather than against the idea as a whole and can best be considered later in the discussion of the exact provisions. The same statement is generally true of the objections raised in the interests of the employee. One objection raised by certain employees, however, goes to the root of the whole matter and is general in its nature—namely that a retirement plan should not be compulsory.

Individual
Liberty

Objection of Employees to Compulsory Features. Employees here and there, rarely any very considerable number, will take this position. The cost of benefits granted by the system is borne ultimately by the employee, regardless of who turns the money into the fund, for the benefits become part of the compensation. The liberty of the individual employee to take his compensation in cash and to do with it as he will should not be infringed. Any retirement system that impairs this liberty is bad, and they advocate either retention of the present system of no retirement benefits or else the establishment of an optional system.²⁴

Optional
Systems
Ineffective

General experience with optional systems of social insurance,

ual needs of the abnormal employee." Our New Peonage: Discretionary Pensions, in his *Business a Profession*, Boston, 1914, p. 66.

²⁴ The London County Council Superannuation and Provident Fund Act overcomes this objection in part by the excluding from compulsory membership: All persons who shall annually prove to the satisfaction of the Council that they have made and are continuing to make either by being members of a friendly or benefit society or by insurance or in any other manner such provisions to meet the events or contingencies provided for by this scheme, as will secure to them (or in case of death to their representatives) no less benefit substantially than would in the same events or contingencies, have been secured to them under this scheme, had they been contributors to the fund.—Superannuation and Provident Fund, London County Council, January, 1913, par. 5, p. 4.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

and retirement funds,²⁵ and the experience with optional systems of life insurance in the English civil service,²⁶ tend to indicate that they do not meet the requirements, because many employees do not join. An administrative officer confronted by the case of a man who, through accident or disease, is no longer really fitted to do his work but is still able to report for duty and to make an appearance of activity, would find scant comfort for having that man dismissed in the fact that had the man been willing to join the association he would not now be unprotected and there would be some provision for his wife and children. The man would invariably have an excellent reason for not having joined the fund; his family demands were too great; he had a plan of saving that would have beaten the system ultimately if it had not been for this accident or sickness or if very attractive investments had not proved worthless. The government may easily fail of the accomplishment of those purposes which lead it and the general public to the

²⁵ Report of the Massachusetts Pension Commission, Massachusetts House Document, No. 2450, Boston, 1914, p. 15.—“The Moral Influence of a University Pension System,” by Henry S. Pritchett, *Popular Science Monthly*, November, 1911, p. 505, New York, 1911.—“Social Insurance,” by I. M. Rubinow, p. 345.—“Statistics of the Civil Service,” by William Farr, December 18, 1848, before Statistical Society of London in its publications. See also his testimony before the Select Committee on Civil Service Superannuation, British Parliamentary Papers, 1856, Vol. IX, p. 184, London, 1856.—“Old Age Pensions vs. Old Age Annuities,” by Miles M. Dawson in *Bulletin des Assurances Sociales*, Paris, 1912, Tome 23, pp. 33-61, Congress International des Assurances Sociales.

²⁶ Of the 14,645 officers on the establishment who received £160 (\$778.64) or over and for whom information was available, 3,842 made no claim for a reduction of income tax because of life insurance premiums paid for the year ending March 31, 1902. See Report of Commission on Superannuation in the Civil Service British Parliamentary Papers, 1903, Vol. XXXIII, pp. viii and ix, and Appendix, p. 218. The figures are reprinted in “Civil Service Retirement, Great Britain and New Zealand,” by Herbert D. Brown, Senate Document, No. 290, 61st Congress, 2d Session; reprinted as Appendix B, in the Report of the Commission on Economy and Efficiency on “Retirement from the Classified Civil Service of Superannuated Employees,” House Document 732, 62d Congress, 2d Session, Washington, 1912, p. 163.

RETIREMENT OF PUBLIC EMPLOYEES

establishment of the system, unless membership at least for all new entrants is compulsory.

Argument
for Com-
pulsion

In favor of compulsion a strong theoretical case can be made. The government may say that the people desire to be model employers and the compensation they pay to the employee during his years of active service is intended to be sufficient to enable him to insure some provision for himself and family in case his earning powers are impaired by sickness, accident or old age. If this compensation is paid to the employee in cash at the time the services are rendered, he may dissipate it; and, if he loses his earning power, he may come to the public asking for a type of charity—retention on the active rolls after he is unable to work—a request made necessary because he has spent that part of his wages which he should have saved or used for the purchase of sickness or accident insurance. The government must protect itself against this type of appeal and can only do so by withholding the required amount from current pay and giving it when needed in the form of a retirement allowance. The government thus insures its employees, and, at the same time, attempts to insure itself against the improper retention of incapable persons in the active force.²⁷

The
Objections
Enumerated

Five Objections Raised by Public. The principal objections to a retirement system are those raised by the general public.²⁸ The five that follow may be enumerated as the ones most commonly advanced.

1. It keeps in the service men who should be eliminated.
2. It discourages personal thrift.
3. It attacks the problem from the wrong side, since what is needed is general instruction in the use of money.

²⁷ This is essentially the argument of the Massachusetts Pension Commission. See Report, Massachusetts House Document, 2450, p. 13, Boston, 1914.

²⁸ "Retirement Legislation" New York Civil Service Reform Association, p. 5.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

4. It creates a specially privileged class, supported in old age, or in the event of earlier disability, at the expense of the taxpayer.
5. It opens the door of the treasury to a pension graft.

Each of these objections deserves special consideration.

The argument that a retirement system keeps in the service men who should be eliminated is based on the following experience common under a defective system. An employee becomes inefficient from some cause other than old age, accident or disease, which will not entitle him to an allowance, and he should, therefore, be dismissed. The administrator, however, does not dismiss him at once because to do so would mean not only loss of immediate salary, but also loss of that provision for old age which would be his should he continue in the service longer, sometimes even a very little time longer. That this objection is one of weight is not to be disputed, but it is one that can be largely overcome by a wise development of the detailed provisions of the system. It is of applicability only if the system is not well designed and provides for a forfeiture on withdrawal from the service whether by dismissal or by voluntary resignation. If the system gives a man the value of his accumulated rights under the system in event of resignation or dismissal, it may even facilitate removal in such cases. This whole matter is considered more in detail in Chapter VII, pages 216 to 232, which deals especially with the question of a benefit in event of withdrawal.

Tendency
Toward
Improper
Retention
of Em-
ployees

That a retirement system discourages personal thrift is a difficult thing to prove or disprove. That it forces some people to make provision for the future who are utterly lacking in the virtue of thrift and that it may easily be made to include a comparatively inexpensive system of insurance against permanent disability in the early years of life, thus giving a protection which individual thrift alone cannot possibly equal, are frequently regarded as being distinct merits of the system. It accomplishes systematically and uniformly much of the

Dis-
courages
Thrift

RETIREMENT OF PUBLIC EMPLOYEES

social good that individual thrift achieves, and it accomplishes some things which individual thrift cannot achieve. What it does to the virtue of thrift as an element of moral character can scarcely be determined.²⁹ Much would depend on the nature of the system, and, of course, the point will be considered again in connection with the detailed provisions, especially with those concerning contributions by the employee. Dr. Henry S. Pritchett, who has had a rather exceptional opportunity for observation through his connection with the retirement system for college teachers, established under the Carnegie Foundation for the Advancement of Teaching, has advanced the interesting theory that it may actually promote

²⁹ The following quotation from the Webbs' "Prevention of Destitution" dealing with general compulsory social insurance, is an exceptionally strong statement of the thrift argument. It is questionable whether the latter part of the argument is applicable to a retirement system in which the benefits become part of the compensation for services rendered:

"But compulsory insurance is almost a misnomer. The special features of thrift or foresight, the independence in self-government and the willingness to subordinate the present to the future, which are, as we have seen, characteristic of the insurance which is an optional and voluntary act of individual prudence, disappear altogether in a national and compulsory and universal system. Compulsory insurance as we see it in the German Empire, and as it is embodied in the Chancellor of the Exchequer's scheme of 1911, with the automatic and obligatory deduction from wages, entails on the contributor no act of thrift, involves no exercise of the quality of foresight, demands no responsibility for administration and implies no subordination of present impulses to future needs. The contribution arbitrarily levied on every wage earner amounts to nothing more nor less than a tax—the poll tax that we got rid of in 1381—having no connection with the idiosyncrasy of the contributor, and no more influence on his moral character than any other tax. Moreover, the beneficiaries have to recognize that, as in the case of any other government service, they are reaping what they have not themselves sown. For it must be remembered that in the Governmental system of sickness insurance and indeed in practically every universal and compulsory scheme, the beneficiaries can no longer pride themselves on paying their own benefits. A considerable proportion of the funds are contributed from other sources; from the employers who are not entitled to benefits, and from the Government, involving taxation upon all the persons, rich and poor, who are outside the scope of the scheme."—"The Prevention of Destitution," by Sidney and Beatrice Webb, Longmans, Green & Co., London, 1911, p. 169.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

thrift; that the individual college teacher frequently feels that the task of securing protection against the risks of life through private thrift is hopeless and therefore he takes his chances except, perhaps, for life insurance, whereas, under a retirement system, which makes a minimum provision certain, he saves to provide for the private objects of life that are not covered by the system.³⁰ Thrift is the product of foresight, and the supposition does not seem unreasonable that it may be promoted by a system which frequently brings to the mind thoughts of the important dangers of life and fairly definite ideas regarding the sums that will be available to meet those dangers if no special thrift is practiced.

Education in the use of money and the establishment of a retirement system hardly seem mutually antagonistic. Education in the common schools in the use and management of money can doubtless be carried very much further than at present with great advantage to the public; and it is probably highly desirable that every pupil should have at least an elementary knowledge of the broad general facts regarding the earning power of money, the commoner types of savings institutions, the various kinds of insurance, methods of home purchasing and the costs of installment purchases for consumption, credit, small purchasing, and small loans, and the dangers of "get rich quick" institutions. Such knowledge would doubtless lead a person to attach a proper value to a retirement system. He would not be so likely to be misled by one which offers apparently attractive benefits but lacks suitable provision for raising the money to pay them, and he would appreciate the merits of one which, though promising less, will fulfill more.³¹ A retirement system, in so far as new entrants are concerned, is virtually a financial institution and,

Education
in Use of
Money

³⁰ "The Moral Influence of a University Pension System" in *Popular Science Monthly* (New York), November, 1911, p. 508.

³¹ For an article emphasizing the importance of thrift and education in sound principles of saving, investment and insurance, see "Poverty and Pensions in Old Age," by Frederick L. Hoffman, *American Journal of Sociology*, September, 1908.

RETIREMENT OF PUBLIC EMPLOYEES

incidentally it may be added, should be subject to the usual state supervision exercised over financial institutions.

Creating
Specially
Privileged
Class

To charge that a retirement system creates a specially privileged class supported in old age, or in the event of earlier disability, at the expense of the taxpayer, is to ignore the situation which generally exists in the absence of a retirement system. It could be more fairly stated that an adequate retirement system endeavors to reduce to a minimum that special privilege which is inherent in the nature of public service and which public servants therefore necessarily enjoy. It provides further for equality of treatment of all public employees, so that the man who is totally disabled and can no longer report for duty may not suffer total loss while his former fellow employee, who may be no more efficient but is better able to get about, enjoys the privilege of drawing full salary on the active rolls.³²

³² "Secretary MacVeagh has most clearly pointed out that except with employees of peculiar hardness, all governments and institutions conduct their operations really as an imperfect pension system. The Secretary writes in his report for 1909: 'The service is blocked in many instances by the unwillingness of the officials in charge to throw out of place worthy men and women who have given the best of their lives to the work of the government. So that, in a very imperfect and unsatisfactory manner, a pension system is and long has been in operation.' Every college officer appreciates the fact that the colleges are also operating, in this imperfect sense, a pension system, but one qualified at every step by favoritism or partiality. One who has occasion to visit many colleges of the country will be astonished at times by two methods of procedure in this matter, diametrically opposite, and yet entirely to be reconciled with the methods under which our colleges are governed. He will be astonished in the first place at the inhumanity which will turn out an old teacher after long service with no means of support. He will be astonished in the second place at many institutions by the presence in the faculty of a considerable proportion of teachers who have long outlived their usefulness and who are practically pensioned by their retention in the service. It is not one of the smallest of the disadvantages of this form of pensioning that the presence of the aged and the infirm often arouses in the minds of shallow and impatient men a disregard for the really superior qualities which many of these in advanced age possess. There are always those who believe under such circumstances that all can be remedied by a sweeping edict which often tears down more than it builds up."—*Moral Effect of University Pension System*, by Henry S. Pritchett, *Popular Science Monthly*, New York, 1911, p. 506.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

It is a condition and not a theory; and the general experience of the more important foreign governments, which are reputed to have a type of public service far higher than is secured in this country, has led them practically without exception to establish retirement systems. Establishing a system is essentially a business measure, but one that can easily be given the color of special privilege, charity, or benevolence. The objection that naturally arises against what appear to be special privileges for government employees is an important consideration in developing a system and is considered more at length in the chapter on the contributory as opposed to the non-contributory systems. If a provision is included that requires new entrants to pay for their retirements, either in whole or in part, the chances for popular misunderstanding of the exact nature of the system are reduced to a minimum.³³

³³ "A popular objection to municipal pensions, which influences many voters and taxpayers to oppose the establishment of retirement systems for city employees, emphasizes the injustice of taxing workers in general for the benefit of a special class of employees. The attitude of the man who urges this objection is that the class of municipal employees is a peculiarly favored one; the members draw good pay in easy berths, they ought to take care of themselves in old age. 'Why should I be taxed,' the objector asks, 'in order to provide pensions for this favored class?' If pensions are to be granted at all, it is contended, they ought to be passed around to workers of all classes. It is unjust to single out any special group of beneficiaries. In this connection there appears to be a particularly strong objection in the minds of many opponents of municipal pensions to the payment of retirement allowances to clerks and salaried employees. Some who approve of retirement allowances for common laborers earning small wages strenuously object to the extension of the benefits of the retirement system to better paid employees. It is argued, in support of this objection, that the handicap of age is much less in the case of clerical employees than in the case of manual laborers. It is said that an old man can push a pen when he could not swing a pick effectively. . . . It is to be observed that this contention rests on the assumption that a retirement system must involve an additional burden to the taxpayers. This assumption is entirely gratuitous. It would certainly not hold true of a properly organized contributory system with a large share of the expense borne by the employees. Private corporations even regard a wholly non-contributory system in which the pensions are paid entirely by the employer, as economical. It is reasonably certain that a contributory system, such as is proposed in the Massachusetts act, would, in the long run, save money for the

RETIREMENT OF PUBLIC EMPLOYEES

Danger of
"Pension
Graft"

The real danger of a retirement system is that it may open the door of the public treasury to a pension graft. The government employees become an organized force with an immediate personal interest at stake, whereas the general public—the people who pay the taxes in the first instances and those to whom at least a portion of the burden is ultimately shifted—have at most a very slight personal interest in the system, especially if the money to pay the costs of government is collected through indirect taxation. The great danger of such a situation is that little by little the organized, active employees will gain from the legislative authorities, especially just prior to elections, one concession after another. When at length the burden on the taxpayers and through them upon the public as a whole becomes sufficiently great to cause the worm to turn, vested interests will have arisen and reform will be difficult.

Necessity
for Expert
Actuarial
Advice

Unfortunately, retirement legislation is peculiarly susceptible to abuse of this character. The employees ask for what appears on the surface to be but a minor concession, a slight increase in the retirement allowance or a slight modification of the rules to permit retirement just a few years sooner, at sixty-five instead of seventy or at sixty instead of sixty-five. They offer plausible figures to show how little the cost will be. They frequently consider only the one factor of increase that is obvious and neglect to consider the numerous factors that are hidden. That accurate figures can only be secured by an expert actuary after long and painstaking investigations they either do not know or are unwilling to admit.

taxpayers. Such saving would be effected in three ways: First, through elimination of the direct waste of money paid to aged employees who have outlived their usefulness; second, through stoppage of the indirect loss entailed by the slow pace forced upon the rest of the workers by the presence of inefficient veterans; third, through the positive gain that would result from the substitution of younger men for the superannuated employees, from the increased efficiency promoted by the retirement system and possibly from the attraction of a higher grade of men into the municipal service."—"Retirement Systems for Municipal Employees," by F. Spencer Baldwin, in "Annals of American Academies of Political and Social Science," Vol. 38 (1911), p. 13.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

Not infrequently they bring forward tables of cost, which they present as absolutely conclusive, because, forsooth, they were prepared by an expert accountant. Unless the expert accountant is also an expert actuary, he ventures beyond his field when he touches the complicated actuarial problems involved in a retirement system, requiring for their solution a complicated application of the mathematical rules of probability. The small-caliber legislator who is anxious to curry favor with the organized employees, knowing that the general public is unorganized and somnolent, is not infrequently the same man who has a profound contempt for experts. Give him pencil and paper and in a few seconds he can do all the figuring that is worthy of a representative of the richest people on earth when dealing with the employees who have grown old and feeble in long and faithful service to the government. His figures will convince him that those furnished by the employees' lobbyists are conservative; and unfortunately the retirement problem is so deceptive that for the first few years the improperly derived figures may be abundantly proved by actual experience. It may not be apparent until after the lapse of many years that somebody blundered.

If it were not for those broad-gauge men in legislative assemblies who believe that a division of labor in public affairs is just as essential as a division of labor in private affairs and who demand that in legislating on technical subjects experts in those subjects be consulted, the ordinary citizen who has the public interest at heart would have to oppose all retirement legislation and accept the retention of the old and disabled on the active rolls as probably the lesser of two evils. Given, however, a legislative authority that is willing to recognize the three parties to the problem and to have the general public represented at least by a properly qualified actuary furnished with the funds and assistance needed for a reasonably accurate determination of the future costs of all proposals,³⁴ as is set

³⁴ "I think it may be laid down as an axiom that no one is able to form a fund on safe lines until he knows how to value one. When

RETIREMENT OF PUBLIC EMPLOYEES

out more at length in Chapter XVI, it would seem entirely possible in this country, as it has been abroad, to develop retirement systems that will overcome the evils inevitable in its absence and at the same time protect the treasury from exploitation. Perhaps this country is fortunate in its *prima facie* opposition to retirement legislation for public employees if that opposition can be made to prevent further establishment of ill-considered retirement systems.

In connection with this subject of the danger of exploitation, the chapter on the contributory vs. the non-contributory system is of importance, as also is Chapter XVI, which describes generally the establishment and maintenance of a system in the actuarially reserve basis. A system conducted on the actuarial reserve basis and supported in a considerable measure by the contributions of the employees, in the form of salary deductions, probably reduces to a minimum the danger of a retirement graft. The danger is, however, one that must be kept in mind constantly.

SUMMARY

To summarize the objects and interests of the three parties to the systems briefly it may be said that:

The government as an employer seeks only the improvement of the force.

The employees, the new entrants only being considered, seek a sound, adequate and equitable financial institution through which at minimum cost they may be protected in the event of the happening of certain of the principal dangers of life.

The general public desires that each of these two objects be

you are asked to form a fund, you must ask what the subscriptions are to be and what benefits are to be given and whether the employer is prepared to start the fund with a substantial sum down and whether he is prepared to guarantee a certain rate of interest. You will then ask for the same information that you would require for a valuation. You will then have to go through the whole process of constructing a table of multipliers according to the benefits."—*Staff Pension Funds* by H. W. Manly, *Journal of the Institute of Actuaries*, Vol. XXXVI, London, 1902, p. 256.

OBJECTS SOUGHT IN ESTABLISHING SYSTEM

realized so that it may be protected on the one hand from these losses resulting from inefficiency in government service that are inevitable in the absence of a system, and on the other hand from the expense of supporting through public or private charity those who are forced to leave the service because of inefficiency due to old age, accident or disease.

The real danger in retirement legislation is that it may result in exploitation of the public treasury, and this danger is one to guard against in progressing rather than one to prevent progress.

CHAPTER II

ANALYSIS OF THE PROBLEM OF DEVISING AN ADEQUATE RETIREMENT SYSTEM

Purpose of Chapter. The Future Entrants and the Present Employees. The Contingencies Involved. Shall a Benefit be Granted? Upon what Conditions? The Superannuation Benefit. The Disability Benefit. What Amount and How Determined? The Superannuation Benefit. The Disability Benefit. The Disability Due to Performance of Duty. The Withdrawal Benefit. Benefit in Event of Death in Active Service; Ordinary Causes; From Causes Arising in Performance of Duty. Death After Retirement. The Cost of the Benefit. Number of Benefits and Cost. Conditions Upon Which Granted and Cost. Amount of Benefit and Cost. Equities Between Individual Employees and Cost. Age at Entrance, Sex, Occupation and Cost. Division of Cost Between Government and Employees. Exaggeration of the Importance of the Issue. Method of Determining Real Significance. The Basis of Division. Actuarial Reserve vs. the Assessment System. Description of the Two. The Merits of the Two Contrasted. Necessity for Actuarial Computations. The Actuarial Deficit on Creation of System. Systems for Small Services. Bad Financial Practices. Protecting System from Financial Indiscretion of Employees. Arrangement of the Detailed Discussion.

PURPOSE OF CHAPTER

The objects which the government as an employer, the employees, and the public seek to obtain through the establishment of a retirement system were considered in the preceding chapter. A fair conclusion to be drawn from that chapter is that the government, in its own interest, must guarantee to its employees reasonable permanence of tenure, and that to eliminate the losses from superannuation and disability, which follow from permanence of tenure, it must establish an adequate retirement system. An adequate retirement system may be defined as one that fulfills the requirements of that branch of the public service to which it applies and is at the

PROBLEM OF DEVISING RETIREMENT SYSTEM

same time fair to the employees as a class and to individual employees, satisfactory to a public appreciative of the social value of such a system, and financially sound. The following pages of this book are devoted to a consideration of the myriad questions of fairly minute detail which have to be considered in devising such a system. The object of the present chapter is to set forth the major questions involved, without any detailed discussion of their solution, so that one may have at the outset a general conception of the nature of the whole problem.

THE FUTURE ENTRANTS AND THE PRESENT EMPLOYEES

At the outset the point must be made that the problem has two branches which are in some ways entirely distinct, namely, (I) to devise an ideal permanent system to apply to those employees who are to enter the service after its adoption and (II) to work out a satisfactory, temporary transitional system to apply to the present employees. The first branch of the problem is by far the more important and the following analysis has been prepared with the future entrants chiefly in mind. The questions that have to be considered in dealing with the present employees are of course in many ways the same, but they frequently have to be answered differently since the present employees are in several important respects not at all like the future entrants and the economic nature of the benefit to the two classes is radically different. A clear understanding of the problem as it affects future entrants will, however, give an excellent idea of the problem involved in dealing with present employees.

THE CONTINGENCIES INVOLVED

The English experience of the past century demonstrates very clearly, if demonstration be necessary, that once an employee is in the service, he cannot go out of it nor pass from the pensioners' roll without directly involving the retirement system. The system will, moreover, be affected even if from

RETIREMENT OF PUBLIC EMPLOYEES

some cause other than accident, disease, or advancing age he becomes inefficient, or if the work which he has been doing ceases to be required by the government, because, in the event of the happening of one of these contingencies, the tendency of the administrative officers will be to attempt to eliminate the employee from the active service by the avenue of the retirement system. The accident or disease which causes disability or death may, of course, result from ordinary natural causes, or it may be the direct result of the actual performance of duty. The contingencies in the life of the employee which are of concern in establishing a retirement system may then be summarized as follows, in the order of their importance to the system:

1. Superannuation, or failure of efficiency due to advancing age.
2. Disability, or failure of efficiency in the early years of life due to accident or disease. The accident or disease may be due
 - (a) To ordinary causes,
 - (b) To the actual performance of duty.
3. Withdrawal from the service:
 - (a) By voluntary resignation,
 - (b) By dismissal.
4. Death in the active service. Death may be due
 - (a) To ordinary causes,
 - (b) To the actual performance of duty.
5. Death after retirement:
 - (a) On superannuation benefit,
 - (b) On disability benefit, the disability being due
 - I. To ordinary causes,
 - II. To the actual performance of duty.
6. Loss of efficiency while in active service not due to accident, disease or advancing age.
7. Loss of usefulness because of changed demands in the public service.

PROBLEM OF DEVISING RETIREMENT SYSTEM

SHALL A BENEFIT BE GRANTED?

The first question which the framers of a retirement system have to consider under each of those contingencies is "What is the proper course to pursue in the event of the happening of this contingency; shall a benefit be granted or not?" A benefit in event of loss of ability through advancing age is the foundation of a system, and hence the question of the desirability of such a benefit is identical with the question of the desirability of any system at all; and the same may be said, possibly with some reservation, regarding a benefit in event of early disability from ordinary accidents or disease, as distinguished from service accidents or disease. Each of the other contingencies presents its own distinct question. In the case of death or disability resulting directly from the actual performance of duty, the question is mainly administrative, whether such cases can best be treated under the retirement system or in some other way; whereas in the case of the other contingencies, it is one of desirability from the point of view of the government, the employees, and the public; and possibly, also, to a certain extent, it is one of feasibility.

UPON WHAT CONDITIONS?

If it is decided to include a benefit in event of the happening of a given contingency, the next step in considering that contingency is to settle upon the conditions under which the benefit shall be allowed. Certain of the contingencies, such, for example, as resignation, dismissal and death, involve events that are naturally clearly defined, and hence the work of establishing the conditions precedent for the granting of a benefit is comparatively simple. Superannuation and ordinary disability, the two fundamental contingencies, on the other hand, are generally conditions of slow development, not clearly defined. To establish proper conditions to govern the awarding of these benefits is therefore a problem of first importance.

RETIREMENT OF PUBLIC EMPLOYEES

The Superannuation Benefit. Analysis of the conditions upon which superannuation systems are, or have been, operated, indicates that the following points must be taken into consideration.

1. Shall the granting of a benefit rest in the discretion of the administrators of the government, or shall certain conditions be established upon the fulfillment of which the employee shall be entitled to retire with a benefit as an established right?

2. Shall the system provide a benefit only, and leave the decision regarding retirement to the discretion of the employee or his administrative superior, or shall it establish certain age or service limitations upon the attainment of which the employee is compelled to retire?

3. If compulsory retirement is necessary to make the system meet the needs of the government, shall a uniform fixed age or service limitation be established, upon fulfilling which all shall retire; or shall certain minimum conditions be established, upon fulfilling which retirement is permissive, and above them certain maximum conditions, upon fulfilling which it is compulsory?

4. Shall any such conditions be based on length of service alone, on age alone, or on both length of service and age?

5. What shall be the exact age condition established, or if a service condition is deemed imperative to meet some peculiar need of the particular branch of the government to which the system is to apply, what shall be the exact service limitations introduced?

6. Have the conditions settled upon been narrowly conceived in the interests of a particular branch of the public service or its employees, or have they been adopted with a view to protecting the interests of society as a whole so that its productive force will not be unnecessarily diminished, and so that no body of subsidized competitors will be introduced into the labor market in late middle life?

The question of providing for a regular system of trans-

PROBLEM OF DEVISING RETIREMENT SYSTEM

fers from an athletic branch of the service to a sedentary branch is one worthy of careful investigation, as it may be the solution of keeping such branches of the government as the police department and the fire department in a high state of efficiency without turning out into the labor market a group of pensioners of comparatively early age.

The Disability Benefit. In determining upon the conditions precedent to the granting of an ordinary disability benefit the following are the principal questions to consider:

1. What shall constitute disability within the meaning of the law? Must it be

a. Permanent? If the decision is that disability must be apparently permanent at the time of retirement, how shall cases of temporary disability be treated? Shall a sickness insurance system be developed, or shall the sick-leave privileges be sufficiently extended to give the protection required to make the entire system adequate?

b. Total, or if only partial, must it disqualify for all government positions or only for the position the employee has been filling?

c. Due to accident or disease?

2. How shall the facts be established and the system protected against the obvious danger of fraud?

a. If by medical examination of the applicant,

I. Who shall choose the examining physician?

II. Shall the examination be made once or periodically?

III. Shall the right be retained to make an examination at any time?

b. Shall the application for retirement originate with the employee or with his administrative superior?

c. Shall the allowance be granted for life, subject to cancellation, or shall it be granted for periods, subject to renewal?

RETIREMENT OF PUBLIC EMPLOYEES

3. Shall the right to an allowance in event of disability accrue immediately upon entering the service or shall a certain minimum period of service be required? If the right accrues immediately, shall adequate provisions be included in the law for a medical examination of all appointees?

WHAT AMOUNT AND HOW DETERMINED?

Determining the amount of the benefit to be provided constitutes another fundamental problem that has to be considered in connection with each of the contingencies upon the happening of which an allowance is to be paid.

The Superannuation Benefit. To settle upon a proper basis for determining the amount of the superannuation benefit is perhaps the most complex question the founders of a retirement system have to face. It can be simplified somewhat by dividing it into three parts, though the parts to a certain extent overlap. They are as follows:

1. What shall be the relation between the amount of the employee's superannuation benefit, and the amount of his salary?

2. What shall be the relation between the amount of his benefit and the length of his service?

3. What shall be the relation between the amount of his benefit and the economic need of himself and his dependents?

In considering the relation between benefit and salary, the founders have to choose between three broad classes of systems:

a. Those in which the benefit is entirely independent of salary,

b. Those in which it is directly dependent on salary, and

c. Those in which it is indirectly dependent on salary.

Independent
of Salary

Of principal importance among the schemes granting benefits entirely independent of salary are:

I. Those paying a sum fixed in the discretion of the grantors,

PROBLEM OF DEVISING RETIREMENT SYSTEM

- II. Those paying a fixed sum alike for all, and
- III. Those paying such an annuity as the accumulations from a fixed uniform regular contribution deposited at stated periods will purchase at retirement.

The applicability of the second and third of these to the service in question has to be considered.

If the service to be covered by the retirement system is not homogeneous and includes many different classes of employees receiving widely different rates of pay, the founders of the system will doubtless deem it expedient to introduce some relationship between the amount of the benefit and the amount of salary. They will then face the difficult question of whether they shall make that relationship direct or indirect. If it is to be direct, the employee will be promised that on retirement he will be paid a certain proportion of his salary, generally a certain fraction (say one-sixtieth for illustration) for each year of service. The salary used as the basis for the calculation may be that which he is earning at the time of retirement—the terminal salary, as it is called, or one of its variants, for example, the average of the last few years, or it may be the average throughout service. On the other hand, he may not be promised any fixed proportion of his salary as a retirement allowance, but he may be required to set aside regularly at fixed times, say on pay days,—or the government may be required to set aside on his behalf at fixed times,—a certain proportion of this salary, and these contributions may be accumulated at compound interest to purchase for him on retirement an annuity, or they may be used immediately for the purchase of a deferred annuity payable at the retirement age. The amount of the annuity will depend on the amount of the accumulation standing to his credit, or on the amount of the contribution. This system may be so arranged that the employee who conforms to the average receives exactly what would have been granted under the direct system; but the benefits will vary in cases which do not conform to the

Directly or
Indirectly
Dependent
on Salary

RETIREMENT OF PUBLIC EMPLOYEES

average. The systems basing benefits directly on salary are highly collective, and are spoken of as involving equality of sacrifice, because each employee with the same length of service on retirement foregoes, under the terminal salary plan, exactly the same proportion of his active pay and, under the other variants, approximately the same proportion. The systems giving benefits based indirectly on salary, in which the amount depends on contributions, or the accumulation from contributions, proportional to salary, are far more individualistic and are spoken of as giving equality of return, because each employee gets the same value for his contributions or the contributions made in his behalf.

The Salary Scale

If benefits are directly related to salary, and if the system is to be scientifically managed on the actuarial reserve basis, the salary scale enters into the very framework of the whole structure. The salary scale is based on averages and makes two assumptions: (1) that the future rate of advancement in salary can be foretold from the rate of advancement among present employees, or the employees of the immediate past, and (2) that it is reasonably fair to assume average advancement for all employees. A system making benefits indirectly dependent on salary can be developed without the use of the salary scale; and if one is used to give closer relationship between benefit and final salary, its use does not affect the financial solvency of the fund, nor does it affect the equities as between employees, because each gets precisely what his own contributions or the contributions made in his behalf will purchase, and is promised no more. The ultimate decision between these two types of systems will, therefore, turn primarily on the weight which the founders of the retirement system attach to the four arguments against the use of the salary scale. They are as follows:

Objections to Salary Scale

1. It introduces an unstable element into the system.
2. It interferes with administrative changes.
3. Under a contributory system it introduces an element

PROBLEM OF DEVISING RETIREMENT SYSTEM

of unfairness as between classes of employees, and as between individual employees of the same class.

4. Under a contributory system, it necessitates changes in the rates of contribution from time to time.

When this most important decision has been made, the details regarding the degree of relationship to final salary can be perfected. Under the direct relationship system the question becomes whether the terminal salary shall be used, or the average during the last few years, or the average throughout service. Under the indirect relationship system the question is how close a connection is desirable and what is the most feasible means of securing it.

Degree of
Relationship

In considering the relationship between length of service and the amount of the superannuation benefit, the first question is naturally whether any such relationship is desirable. Since for many branches of the public service the arguments for a relationship are overwhelming, the question quickly becomes, How shall a relationship be established? If the amount of the benefit depends on the accumulation from contributions made by or in behalf of the individual employee, a relationship is inherent in the system itself, and its exact amount is determined by such factors as the rate of interest earned by the contributions, the age at retirement, and the rate of mortality among the superannuation annuitants. Under other systems the degree of relationship is more largely within the control of the founders of the system; and except as they are restrained by cost, they can establish such a scale as seems desirable in the light of the experience of other funds with scales.

Relation to
Length of
Service

The amount of the superannuation benefit in relation to the economic need of the employee and his dependents can be conveniently considered under four heads:

Relation to
Economic
Need

1. An amount in aid of subsistence,
2. The minimum of subsistence for the employee:

RETIREMENT OF PUBLIC EMPLOYEES

- a. As an individual,
- b. As the head of a family.
3. The amount which will give the employee the necessities of his standard life, and
4. The amount which will involve little sacrifice upon retirement.

The founders of the system must decide which of these classes embraces the benefit that should be paid in the average or typical case. When this has been settled upon, the exact amount can be determined and decisions can be reached on the procedure to follow in dealing with the more exceptional cases.

The Disability Benefit. The amount of the benefit in event of disability from ordinary causes involves the same three broad questions, relationship to (1) salary, (2) service, and (3) economic need. Some important differences between the two should, however, be noted.

Basing the amount of the disability benefit on the accumulations from contributions is impracticable, as the sum available in case of early disaster is not sufficient to be of any real utility. The disability benefit must be on a collective or insurance basis under which the contributions by or in behalf of the employees who escape disability are used to pay the annuities to the unfortunates who do not. In a system providing for a high degree of collectivism, the disability benefit may be based on one of the forms of salary; and if the system is operated on the actuarial reserve plan, the salary scale will be required. The objections to its use in this instance are essentially the same as in the case of the superannuation benefit. If the ideal of the founders is to provide equality of return, so that the dollar paid by or in behalf of one member will buy as much protection as that paid by or in behalf of another, a device giving equality of return can be developed. Correlating the sum thus provided for the disabled employee with the amount to his credit under the superannuation branch of the retire-

PROBLEM OF DEVISING RETIREMENT SYSTEM

ment system then becomes a question for careful consideration.

The relationship between length of service and the amount of the ordinary disability benefit presents its own peculiar problem. The difficulty on the one hand is to offer a sufficient sum from the outset so that the disabled employee will not become dependent on charity, and yet not to get it so large or increase it so rapidly that it becomes an inducement for fraudulent retirements. As the twilight zone immediately preceding the superannuation retirement age is reached, the question becomes whether the amount available in event of disability should not increase fairly rapidly, so that at the superannuation age the two benefits merge without any very broad step between them.

The danger of fraudulent disability retirements likewise must be taken into consideration in dealing with the amount of the benefit, and the economic need of the employees. Until fraud can be eliminated, it seems hardly safe to pay the benefits which might seem desirable if the system were dealing only with genuine disability.

Disability Due to Performance of Duty. If disability directly due to the actual performance of duty is to be covered by the retirement system, the whole question of the amount of the benefit has to be reëxamined for that contingency, because the responsibility of the government in event of a service accident, or a service disease, is entirely different from its responsibility in case of ordinary disability. The objection to benefits based directly on salary are far less applicable, if applicable at all, and there is more ground for taking into consideration the employee's dependents. Cases of partial disability from service accidents or disease demand consideration, even if the beneficiary is subsequently employed in an inferior position under the government that pays a living wage. The correlation of this benefit with the others under the system also presents some nice points for decision.

RETIREMENT OF PUBLIC EMPLOYEES

The Withdrawal Benefit. The amount of the benefit on withdrawal, whether by resignation or dismissal, is generally a comparatively simple question, because the maximum advocated is the return of all contributions made by or in behalf of the employee with compound interest or their equivalent. That something less than this full return is fair, if the employee already has received some advantage from the system in the form of protection in case of early death or disability, scarcely admits of argument, and some may question the expediency of a complete return.

Benefit in Event of Death in Active Service: Ordinary Causes. In case of death in the active service from ordinary causes, the minimum benefit must in all probability be the return of the contributions made by or in behalf of the employee with compound interest or their equivalent, but a serious question will undoubtedly arise as to whether this is the best form for the benefit to take. Strong arguments will naturally be advanced tending to show the necessity for the establishment of a widows' and orphans' fund. The *prima facie* case for such a benefit has to be critically examined and its merits have to be contrasted with the far more flexible, special life-insurance benefit of a lump sum to be paid as the employee may direct, since this benefit recognizes that scarcely any two employees have exactly the same interest in a widows' and orphans' fund, and that the interest of any one employee in that fund is very different at different times in his life. The extent to which any special life insurance benefits shall be made compulsory also requires most careful consideration. A possible solution to be discussed is whether the system should not offer optional special insurance benefits to be purchased by the employee as his judgment may direct. The merits of a life insurance benefit in stabilizing a fund operated on the actuarial reserve basis and in furnishing the employees a chance to procure insurance without large costs for the collection of premiums should be considered.

From Causes Arising in Performance of Duty. If death resulted from the actual performance of duty, the responsibility of the government is again so different from its responsibility in the case of an ordinary death, that the question of the amount of the benefit must be reëxamined. The objections to a widows' and orphans' benefit are no longer applicable, for the equitable division of the cost among the employees ceases to be an important factor for consideration. For the same reason benefits based on salary are not objectionable as a means of providing for this contingency.

The legislation establishing the system should probably establish classes of dependents who shall be recognized as entitled to benefits. If a special benefit in event of death following a retirement because of disability incurred in the actual performance of duty is desired, essentially the same points have to be considered in establishing it.

Death After Retirement. The question of the amount of the benefit to be paid in event of death after retirement on a superannuation benefit, or on an ordinary disability benefit, is in many ways similar to that regarding the amount in case of death in the active service from ordinary causes. The demand from some services for a widows' and orphans' benefit will doubtless arise, but again the question has to be faced whether such a provision is not inflexible and more or less inequitable as between different classes of employees. The problem will doubtless become one of how to substitute some device which is equitable as between different employees and at the same time sufficiently flexible to permit each man to provide for his own needs. To meet these requirements the device of optional settlements at the time of retirement has to be considered, whereby a man with no one but himself to provide for can select an annuity for his own life; the man with himself and wife to take care of, a smaller annuity of the same cost payable to himself or his wife so long as either of them shall survive; and the man with children not yet, say, eighteen,

RETIREMENT OF PUBLIC EMPLOYEES

an equivalent annuity payable so long as he shall live, or if he should die before his youngest child is eighteen,—or any other age that may be selected,—until the child shall reach that age. Such devices are both equitable and flexible.

THE COST OF THE BENEFIT

Three major questions have thus far been presented, (1) the advisability of granting a benefit in event of the happening of the given contingency, (2) the conditions upon which the benefit shall be allowed in case one is granted, and (3) the amount of the benefit to be allowed, a question which in several instances, as has been noted, can be conveniently divided into three parts, (a) as related to salary, (b) as related to length of service, and (c) as related to economic need. An important, and at times, a controlling factor, in the decision of each of these questions is that of cost. A question which should be asked regarding each point under consideration is, "What will be the effect of the various possible procedures on the cost of the system?" The precise effect can, of course, be determined only by the experienced actuary after a searching examination of all the existing facts and a fairly elaborate tabulation of available data; and before any plan is definitely adopted the persons responsible for it should have before them practically exact cost figures prepared by an actuary experienced in dealing with retirement systems. The laymen charged with the responsibility of developing a retirement system must, however, keep clearly in mind at all times the general influence which a given procedure will exert on cost.

Number of Benefits and Cost. The relationship between the number of benefits granted and the cost of the system is, of course, manifest. A system which gives the employee all-round protection against the principal dangers of life must, of necessity, cost more than one which gives him merely reasonable protection against declining ability due to advancing

PROBLEM OF DEVISING RETIREMENT SYSTEM

years. Against every benefit, except that in event of superannuation and possibly that of disability, the objection has to be considered that the inclusion of such a benefit will increase the cost. The issue becomes, therefore, whether the benefit is of sufficient value to the government, the employees or the public to warrant including it and increasing the cost in a compulsory system. If the decision is against including the benefit in a compulsory system, the possibility of offering, in event of that contingency, an optional benefit, to be paid for by the employee, merits full examination.

Conditions Upon Which Granted, and Cost. The factor of cost is of almost controlling importance in determining the conditions upon which the benefit should be granted. In dealing with a superannuation benefit, the significant point is that the younger an employee is on retirement, the larger will be the number of years he will live as a pensioner or an annuitant, and hence the more annuity payments he will receive, and the more his retirement will cost. When the cost of the annuity is distributed over the years of active service in the form of annual premiums or contributions to provide for superannuation retirement, a difference in the age fixed for retirement will be found to be even more striking, because if the age is high, a small cost is distributed over many years of active service, thus giving a small premium, whereas if the age is low, a large cost is distributed over relatively few years of active service, giving a high premium. The interest earned by accumulating premiums tends further to accentuate the difference, for money at compound interest a long time earns far more total interest, in proportion to the time on deposit, than money at interest a short time. Any condition, therefore, that permits an employee to get on the superannuation retirement list while still comparatively young is enormously expensive, and the cost of any superannuation system proposed can be materially reduced by a tightening of the conditions.

In the case of disability benefits, the factor of fraud exerts

RETIREMENT OF PUBLIC EMPLOYEES

a strong influence on cost. If the legislation adopted provides for and secures (1) thorough independent medical examinations made periodically, (2) grants for fixed times and not for life, and (3) at least partial payments by the employees, it will tend to prevent fraud. Those retired as disabled will then be, in fact, genuinely disabled, and having impaired lives will, as a class, be short-lived. The cost of their annuities will be comparatively low. If, on the other hand, the system permits disability retirement on the certificate of the employee's physician, some employees will abuse the privilege. Their lives will not be genuinely impaired, and, as a class, they may live fully as long as their more honest fellow employees who stay in harness, paying high premiums for disability insurance necessary to cover the cost of fraud.

The Amount of Benefit and Cost. The amount of the benefits to be allowed must, of course, be determined ultimately on cost, on a nice balancing of the relative merits of present consumption and enjoyment against provision for future contingencies. Here it becomes necessary to consider the development of the family responsibilities of the average man; and care must be exercised lest in providing for him and his wife in their declining years too great a proportion of his earnings are withheld from consumption in those important active years, when he and his wife are performing the fundamental social duty of rearing their children and educating them for effective lives. The needs of old persons must be considered in fixing the amount of the superannuation allowance. In dealing with the amount of the disability benefit some care must be exercised lest cost be allowed to play too great an influence. The nice problem in arranging a disability allowance is to prevent fraud, and at the same time to give in the cases of genuine disability an allowance which will be of real social utility.

Equities Between Individual Employees and Cost. The equities as between individual employees constitute a question

PROBLEM OF DEVISING RETIREMENT SYSTEM

which is becoming of increasing importance in the development of retirement systems, as the benefits under them are being more and more clearly recognized as parts of the employee's compensation for services rendered. Respect for these equities becomes of special moment, if any of the cost is borne directly by the employees; but even if it is not so borne, and the government gives free pensions, it is in the present day a fair question whether the amount of pension given an employee should not bear some fairly definite relation to its cost and whether its cost in turn should not bear some fairly definite relation to his immediate wage. If two men are doing exactly the same work at exactly the same immediate wage, with equal efficiency, it may be doubted whether the government should spend far more for the pensioning of one than it spends for the pensioning of the other, especially when it is recalled that the differences in the cost of pensions may be due to differences between the employees which are mainly personal. If the employees are required to contribute to the cost, the issue becomes more sharply defined; and the persons establishing the system have to ask whether they are justified in forcing one class of employees to pay part of the cost of retiring another.

Age at Entrance, Sex, Occupation and Cost. Recognition of the equities as between individual employees and as between different classes of employees requires that the effect of age at entrance into the service, sex, and occupation, as influencing cost, be given attention. If all employees are to retire at sixty-five, on a uniform flat pension of say \$400, the cost of that pension per year of service rendered the government by the employee retired will depend largely on how old the employee was when he entered the service. The cost, stated in the terms of an annual premium payable throughout active service, will be little in the case of the employee who has given his whole life to the government, whereas it will be enormous in the case of the man improvidently appointed

Age at
Entrance
and Cost

RETIREMENT OF PUBLIC EMPLOYEES

when already near the age of retirement. Even if the government gives free pensions, it is doubtful if the public wants to do more for the man who has served it only a few hours than it does for the man who has labored for it during the heat of the day. If, in a system providing retirement at a fixed age, the employees bear the entire cost and all pay a uniform premium, the government is forcing the young entrant to pay the cost of its own laxity in permitting the appointment of a man already advanced in years. If a fixed period of service is required alike for all, and if all are charged the same premium, the older entrant pays part of the cost of retiring the younger. The general effect of age at entrance must, therefore, be generally understood in establishing a system.

If the service includes many women attention must also be given to the physiological, psychological, and economic differences between the sexes, which may occasion marked differences in the cost of their retirement. The woman's equity in the system should always be respected in event of her withdrawal on marriage; it would be entirely unfair for the male employees to derive a profit from the women who thus resign. On the other hand, if both men and women are to be retired on superannuation benefits at the same age, the annuities for the women will cost more than the annuities for the men, because the women will have the greater expectation of life, and it would be unfair to require the men to contribute toward the extra cost of the women's annuities. A difference in the contribution rates for the two sexes would be even more necessary if different retirement ages for the two should be established, as is sometimes done. If any option regarding retirement is allowed, and if disability retirement is permitted, other marked differences between the sexes may be manifested, necessitating further differences in the rates.

If the service covered by the system is complex, the legislation may have to provide for division into occupational or service groups, with different conditions for each group, and thus differences in cost will arise. Sometimes even if the gen-

Sex and
Cost

Occupation
and Cost

PROBLEM OF DEVISING RETIREMENT SYSTEM

eral conditions governing retirement are the same, the different branches of the service may be so dissimilar that equity will require differences in the rates. Whenever, therefore, a service includes many different occupations, or has many women employees, or receives new entrants at widely varying ages the question of equity as between individual employees in respect to the cost of the system becomes a matter for thorough examination.

DIVISION OF COST BETWEEN GOVERNMENT AND EMPLOYEES

Exaggeration of the Importance of the Issue. The division of the cost of the system between the government and the employees as a class constitutes probably the most bitterly contested question which the framers of a retirement system have to face. It is the familiar issue of the contributory vs. the non-contributory system; and unfortunately it has assumed undue prominence in the consideration of retirement legislation, because it is of great importance to employees already in the service. To them a wholly non-contributory system means an increase in total ultimate wages, whereas a contributory system, not carrying with it an offsetting increase in wages, means a deferment in the payment of a part of the wages which they have been receiving, and on which their existing standard of living is based. Such an issue is necessarily contentious; and the fact that it must inevitably arise in dealing with present employees is one of the reasons, though by no means the only one, for leaving present employees out of consideration in developing a system in the first instance. After an adequate, permanent, all-round system has been perfected, applicable to new entrants and possibly to such of the younger present employees as elect to come under it, then a temporary system can be devised for the present employees that will deal justly with them without impairing the utility of the permanent system. When the system for present employees is discussed the difference between them and future entrants in respect to their requirements, their equities and their ability

RETIREMENT OF PUBLIC EMPLOYEES

to pay contributions must be recognized clearly, and then the decisions must be reached as to how far these differences can be allowed for by changing the contingencies covered, the conditions upon which benefits are granted, the amount of the benefits, and the basis of division of cost between the government and its employees. To reach a sound conclusion regarding the true merits of the controversy, contributory vs. non-contributory systems, the question must, however, be regarded from the point of view of employees who enter the service after the system has been established.

Method of Determining Real Significance. The real significance of the issue is not to be found by contrasting systems which are non-contributory with systems that are contributory, and explaining all the differences by the fact that one class has contributions, whereas the other has none. The essential point to determine is what the inclusion or exclusion of a contributory feature makes inevitable. Does the fact that a system is non-contributory necessarily preclude the granting of any benefit that may be regarded as essential? Does the inclusion of a contributory feature necessitate the payment of a benefit that it is unwise to include under any system? Is the organization and management of the system necessarily dependent on the decision regarding contributions? Is the real incidence of the cost of benefits determined by the simple device of placing it on one party or the other in the law, or is it determined by fundamental economic forces? Is the moral stamina of the employees necessarily affected by a public demonstration that they bear the cost of their own retirement, or can they take what is commonly called a "free pension" with no more moral danger than is encountered in taking their wages? Will the public and the members of the legislature recognize the true nature of the transaction as well under one system as the other? Under which is the greater danger that the employees may organize to demand increased benefits without giving any consideration to cost? These are

PROBLEM OF DEVISING RETIREMENT SYSTEM

some of the more important points which the founders of a system have to consider in the more or less theoretical analysis necessary to reach a conclusion of the real, the ultimate, merits of the contributory and the non-contributory systems. After a theoretical decision regarding merits has been reached, the question of feasibility has to be considered. Can a contributory system be operated at a reasonable cost? If adequate records are kept regarding the operation of a non-contributory system, will the difference in cost between the two be material? Are the advantages of the contributory system sufficient to offset any increased expense of operation?

THE BASIS FOR DIVISION

If the final decision reached is that the employees should contribute toward the cost of their benefits, the next point for discussion is whether they should pay the whole cost or whether the government should pay part. This is the issue of the wholly contributory vs. the partially contributory systems. Closely related to it is the question of indirect contributions by the government; whether even under a wholly contributory system the government ought not to meet the expenses of managing the system, and should not guarantee a rate of interest and the financial solvency of the system. The division of cost in the past, under partly contributory systems, has apparently been based on expediency, but the question may be raised whether possibly a division according to the relative interest of the government and of the employees in the benefits provided may not be possible. If optional benefits are granted, it may seem doubtful whether the government should share in their purchase. Again the issue must be faced whether the government should divide the cost on the selected basis (say, half and half) with each separate employee giving a larger proportion of his earnings for one than for another, or whether it should divide the cost in the agreed proportion only with the average or typical employee; and, having thus fixed what proportion of salary it will contribute, pay that

RETIREMENT OF PUBLIC EMPLOYEES

same proportion for each employee. The employee himself would then make up whatever might be needed in his own particular case. Employees who could get retirement benefits cheaply because of early entrance into the service, or some other personal factor, would not contribute so large a share of the total cost of their retirement as would those who, because of later entrance or some other personal factor, could only get retirement benefits at great cost. For each of them the government would contribute the same proportion of salary.

A guarantee of the interest rate and of the solvency of the fund are of importance chiefly if the fund is operated on the actuarial basis.

THE ACTUARIAL RESERVE VERSUS THE ASSESSMENT SYSTEM

Description of the Two. The gravest problem of public finance involved in the establishment of a retirement system is whether it shall be operated on the actuarial reserve basis or on the assessment or cash disbursement basis. Under the pure assessment or cash disbursement plan, no fund is established, and all benefits are paid as they fall due from the current revenues of the government. If contributions are collected from the employees they are simply included as general revenues, and are immediately paid out. Under the actuarial reserve plan a fund is established, and at regular intervals, generally on pay days, is turned over to the fund a sum which, broadly speaking, will be sufficient with the compound interest it will earn to pay for all the benefits which will ever fall due as the result of the service rendered during the period covered by the payment. All the money coming in on account of the retirement system is invested at interest, and all benefits are paid from the fund thus created.

Three distinct differences between the two systems should be clearly recognized.

(1) Under the actuarial reserve plan the taxpayers who re-

PROBLEM OF DEVISING RETIREMENT SYSTEM

ceive the service pay all the obligations incurred by the government in respect to that service; whereas under the assessment or cash disbursement plan the taxpayers at the time the service is rendered pay the immediate wage and leave for some future taxpayers the payment of the prospective benefits which have accrued in respect to that service. Future taxpayers under the assessment or cash disbursement plan pay the immediate wage for the services rendered them, and the benefits which mature in their day in respect to services rendered a prior generation. Under a cash disbursement system the generation establishing the system escapes with little or no payment, and passes the burden to the future, whereas under the actuarial reserve system each generation pays its share.

(2) Under the actuarial reserve system, the money available for payments has come in part from taxes and in part from the interest earned by this money in the time between its collection and its disbursement, whereas under the assessment or cash disbursement plan, all the money comes directly from the taxes and no interest is earned, because practically no time elapses between the collection of the money and its disbursement.

(3) Under the actuarial reserve plan the amount required from the taxpayers annually for the retirement system bears practically a fixed relationship to the sum raised for the immediate wage of those in the service, whereas under the assessment or cash disbursement plan the proportion between the amount required for retirement benefits and the amount required for wages is for several generations a constantly increasing proportion.

The founders of the system must clearly distinguish between a genuine actuarial reserve, and a mere fund established on guess work. It takes more than a fund to make an actuarial reserve. The actuarial fund is so arranged that the payments will accumulate a reserve, which will be sufficient to pay all benefits on retirement. The problem of fixing the amount of such payment can only be solved by a properly qualified actu-

RETIREMENT OF PUBLIC EMPLOYEES

ary. Almost innumerable precedents of mere retirement funds can be found, which have become insolvent through attempting to give benefits for less than benefits cost, but they should not be confused with genuine actuarial reserve systems, which are more recent developments in retirement legislation and are scientifically planned.

The Merits of the Two Contrasted. The merits of the assessment system must be considered: (1) That it is simple, and (2) that it is safe; and against them must be set its defects:

1. It is unbusinesslike and conducive to extravagance;
2. It is liable to popular misunderstanding and attack;
3. It is inequitable as between successive generations of taxpayers;
4. It is not adaptable.

In contrast with these must be considered the merits of the actuarial reserve system;

1. It is equitable as between successive generations of taxpayers;
2. It is businesslike;
3. It is comparatively safe from popular misunderstanding and attack;
4. It is adaptable;

yet unless properly safeguarded in the legislation establishing it, possibly expensive and to a certain extent dangerous.

NECESSITY FOR ACTUAL COMPUTATIONS

Even if for some reason of public policy the legislators adopt the doubtful expedient of operating the system, in whole or in part, on the assessment or cash disbursement plan, consideration of the merits of the actuarial reserve system should demonstrate the necessity for careful actuarial computations and the establishment of a so-called "paper fund," in which,

PROBLEM OF DEVISING RETIREMENT SYSTEM

although no money is actually funded, all the computations are made as if it were.

The laymen concerned in establishing a system cannot hope to become expert actuaries, but their work demands of them that they should have a general knowledge of the actuarial processes involved in the organization and management of a system on the actuarial reserve basis. They must appreciate the importance of collecting what might seem at first unnecessarily elaborate data regarding the employees, and the tabulation of these data so that the actuary can be guided in selecting the rates of probability needed to anticipate future developments from a study of the experience of the past, and they must realize the absolute necessity of establishing an adequate system of records so that periodical examinations of the fund can be made by the actuaries cheaply to determine its actual condition and to make such changes as may be necessary to keep it in a permanent state of solvency. The legislation which is adopted should provide for a periodical actuarial examination of the system if its size does not justify the permanent employment of an actuary. The question of how frequent these examinations shall be must, therefore, be settled.

THE ACTUARIAL DEFICIT ON CREATION OF SYSTEM

The method to be followed in meeting the actuarial deficit which exists at the establishment of any system that attempts to provide benefits to employees already in the service, in respect to their period of employment prior to the establishment of the system, will demand careful study, as it is in itself a fairly intricate problem of public finance.

SYSTEMS FOR SMALL SERVICES

In some cases the persons seeking the establishment of a retirement system will realize that the number of employees involved is not sufficiently great to permit of the operation of a system on the actuarial reserve basis, and yet they will wisely hesitate to attempt to pay retirement benefits out of

RETIREMENT OF PUBLIC EMPLOYEES

current revenues. Their task is to get some central agency, such as the State, to serve as an insurance carrier for their employees and those of other similar units on some basis that will be equitable as between communities, as well as between employees. Failing in that they have to see how far they can develop a makeshift system through the use of insurance and annuities purchased from private companies.

BAD FINANCIAL PRACTICES

Attention also has to be given to the matter of raising funds and to the danger of making for the retirement fund a permanent appropriation of the revenues from any particular source. To a peculiar degree the operation of a retirement system requires a watchfulness which can only be secured by having the whole appropriation necessary to meet its cost one clear-cut item in the appropriation act, so that the public can readily determine what the retirements are costing.

PROTECTING SYSTEM FROM FINANCIAL INDISCRETION OF EMPLOYEES

One subject for determination, comparatively simple in itself, is really of great importance to the public, namely, how to make sure that, after all the machinery has been established and has done its work, the employee may not, by losing his accumulation through financial indiscretion, destroy all the good accomplished. In this connection also the founders of the system have to consider how far it is wise to go in permitting the employees to borrow from the fund. One proposal, almost invariably, is that they be permitted to borrow their reserve in cases of emergency, with no special security, whereas another is that they may borrow on adequate security at the rate of interest the fund is earning. According to this second scheme, the fund could purchase first mortgages on the property of its members at the rate of interest which the fund is then getting on its current investments, thus enabling such employees as may so desire to become owners of their own dwellings or other property.

PROBLEM OF DEVISING RETIREMENT SYSTEM

THE ARRANGEMENT OF THE DETAILED DISCUSSION

The questions which have been briefly mentioned in the preceding pages of this chapter have perhaps been sufficiently numerous to indicate in a general way the nature of the problem which confronts persons who attempt to develop, or to assist in developing, a retirement system for public employees. The remaining chapters of this book are devoted to a more detailed examination and discussion of these questions and of some others of probably lesser importance. In this brief analysis what has seemed to be the logical order of development has been followed, and the contentious question of contributions has been allowed to take its orderly place as a problem of financing the system. In the detailed discussion the two chapters dealing with contributions are placed first, so that what appears to be an exaggerated issue, at least as far as future entrants are concerned, may be carefully examined at the outset, thereby clearing the field for the consideration of the more vital issues, the benefits to be granted, the conditions upon which they are to be granted, their amount, and how it is to be determined, and how the whole system is to be financed, so that the benefits expected shall be actually realized.

Attention should perhaps be called to the fact that in discussing such questions as the equities between individual employees, a wholly contributory system is frequently assumed, though so far as is known one is nowhere in actual operation. Without now discussing any other merits which a wholly contributory system may possess, it is a wonderful instrument to use in analyzing a complex situation. One can say, "Assume a wholly contributory system," and at once a question like that of equities becomes clearer, especially if one accepts the doctrine that retirement benefits are part of wages and that economic forces tend inevitably to place the burden on the employees, whether the system be contributory or non-contributory.

In the detailed discussion in the following pages, each of the

RETIREMENT OF PUBLIC EMPLOYEES

more important contingencies has been made a chapter under which the various questions up to, but not including, the financing of the entire system, are discussed. In the case of disability, however, a single chapter covers both the ordinary type and that occasioned by the actual performance of duty.

The order in which the subsequent chapters appear is given below, and from the preceding analysis one can tell fairly well the ground covered under each. The exact scope of each is, of course, given in the table of contents.

CHAPTER	TITLE
III.	The Contributory vs. the Non-Contributory System.
IV.	The Wholly vs. the Partly Contributory System, and the Indirect Contributions of the Government.
V.	The Superannuation or Service Benefit.
VI.	The Disability Benefit.
VII.	The Benefit on Withdrawal from the Active Service, Whether by Resignation or Dismissal.
VIII.	The Benefit in Event of Death in the Active Service, Death Not Caused by the Actual Performance of Duty.
IX.	The Benefit in Event of Death in the Active Service, Death the Direct Result of the Actual Performance of Duty.
X.	The Benefit in Event of Death After Retirement.
XI.	The Employee Who Becomes Inefficient from Causes Other Than Accident, Disease or Old Age.
XII.	A Benefit in Event of the Abolition of Position or Reorganization of Office.
XIII.	The Present Employees.
XIV.	The Actuarial Reserve Plan vs. the Assessment or Cash Disbursement Plan.
XV.	The Establishment and Operation of a Retirement System on the Actuarial Reserve Plan Generally Described.
XVI.	The Actuarial Deficit Created When a New System Promises Benefits to Present Employees for Past Service.
XVII.	Systems too Small to be Operated on an Actuarial Reserve Basis.
XVIII.	Certain Common Practices in Financing a Fund That Are Objectionable.
XIX.	Protecting the Public from Financial Indiscretion of Retired Employees.
XX.	Conclusions.

CHAPTER III

THE CONTRIBUTORY VS. THE NON-CONTRIBUTORY SYSTEMS

The Nature of the Question. Definition. Benefits not Necessarily Affected. Financial Basis not Necessarily Affected. Cost of Benefits Not Affected. Economically Unimportant to New Employees. Of Moral or Psychological Importance Mainly. Contributory System More Flexible. *Four Principal Objections to Contributions.* Failure in English Civil Service. Against Interests of Government. Against Interests of Employees. Expensive to Administer. *Summary.*

THE NATURE OF THE QUESTION

Definition. Probably the most warmly debated question that arises in the establishment of a retirement system is whether the government shall pay all the costs of the benefits or whether the costs shall be borne in whole or in part by the employees. If the government pays all the costs, the system is technically referred to as "non-contributory," and popularly it is called a "straight" pension scheme or a "free" pension scheme. If the employees pay something towards the costs, the system is referred to as contributory. Contributory systems may be wholly contributory, if the employees pay for all the benefits, or partially contributory, if the employees pay part and the government part.

The exact bounds of the question, contributory vs. non-contributory systems, as indicated by these definitions, have at times been obscured by the arguments; and points have been drawn in as necessary parts of this question which as a matter of fact are not involved at all from a theoretical standpoint.

Benefits Not Necessarily Affected. The payment of a benefit in event of resignation or dismissal, or in event of death

RETIREMENT OF PUBLIC EMPLOYEES

in the active service or in the early years after retirement, has, for example, been regarded at times as the essence of a contributory system, but no inherent quality of the non-contributory system prevents the inclusion of such benefits under that type of organization. Such benefits are of interest primarily to the employees and their dependents; and consequently they have been more generally recognized under contributory systems because the employees, paying part of the cost, were in a position to demand them; but that they can and will secure them under the non-contributory system is the experience of the British civil service. The most recent change in the non-contributory system for these employees has been the introduction of a benefit in the event of death or resignation.¹

¹ An act to amend the superannuation acts, 1834 to 1892 (20 September, 1909). The acts relating to the English system have been reprinted in "Civil Service Retirement in Great Britain and New Zealand by Herbert D. Brown, Senate Document, No 290, 61st Congress, 2d Session. Reprinted as Appendix B of the Report of the Commission on Economy and Efficiency on "Retirement from the Classified Civil Service of Superannuated Employees," House Document 732, 62d Congress, 2d Sessions, Washington, 1912.

Mr. H. W. Manly in the *Journal of the Institute of Actuaries*, Vol. 36, p. 215, points out vividly how under a partly contributory system the employees will seek benefits under all contingencies. He seems to infer that the same situation would not arise under a non-contributory system. His conclusions were probably based on his experience with private commercial organizations. The soundness of his conclusion for commercial systems may be questioned, and so far as the public service is concerned, they are contrary to the experience of the English Civil Service under a non-contributory system. In 1857, the Commissioners on the Operation of the Superannuation Act assumed that the demand for a death benefit in the English Service was the result of the contributions then being paid. They recommended the abolition of contributions, but under the new non-contributory system the demand for a death benefit continued until it was finally granted by the act of 1909. (See their report, *British Parliamentary Papers*, 1857, Vol. XXIV, p. XII.) Mr. Miles M. Dawson has strongly indorsed Mr. Manly's statement. See *Annals of the American Academy of Political and Social Science*, Vol. 38, p. 63. The same general position is taken by Mr. James J. McLaughlan in his "Fundamental Principles of Pension Funds" *Transactions of the Faculty of Actuaries*, 1908-9, p. 225. Mr. Manly wrote as follows:

"Funds intended to provide a retiring allowance for the members of a staff are started by employers with the very best intentions, but it is doubtful whether they have ever proved altogether satisfactory.

CONTRIBUTORY SYSTEMS

Financial Basis Not Necessarily Affected. Similarly, the question of accumulating a fund on the actuarial reserve basis, instead of paying benefits as they come due from current reve-

They have the tendency to breed a discontented spirit amongst the employees, and in some cases have proved more costly to the employers than if they had created their own reserves and promised to give a guaranteed scale of superannuation for long and faithful service."

"The general principle is undoubtedly good, and morally sound in the abstract, but it takes no account of the weakness of human nature. The principle that everyone should make a provision for his old age is one which we shall all approve. To encourage this principle, the employer says to his employees: 'If you will all consent to contribute a percentage of your salaries to create a fund for providing pensions in your old age, I will subscribe an equal amount each year'; or 'I will give you a sum down to start the fund.' Sometimes, he adds: 'And I will guarantee that the fund shall be accumulated at a fixed rate of interest.' In this way he feels that he has acted the part of a philanthropist in encouraging thrift; he thinks that his staff will be more contented and settled and are not likely to leave him where they have a stake in the fund; and he has allayed an uneasy conscience which half recognized an unpleasant responsibility to help, in his old age, a man who has given him a lifelong service. The employees' view of the arrangement is very different. To him the contribution is a hardship and an obnoxious tax; and, although he gave his consent to subscribe, it was an agreement made under moral compulsion. What benefit will it be to him? He will never live to 65; and if he does, he is not going to stick in that firm all his life. He does not see why he should be taxed for the benefit of the old members of the staff, who will be retiring soon. The governors might at least raise their salaries to enable them to pay the tax. And if the employer does take a generous view of the case and raise their salaries, the contribution to the fund does not cease to be a tax. It is always a tax, and is always a very good excuse for asking for increase of salary."

"Now where there is taxation, there should always be representation; and the staff are generally invited to elect representatives as managers of the fund, the employers nominating the trustees and reserving to themselves certain powers. The men, starting with the idea that they are never likely to live to 65, want to arrange to have their money back somehow. If they could have a pension at 50 or 55, or even 60, that might make a difference; but, even then, they would like to have their money back if they did not live to get a pension. This then is the kind of reasoning which takes place: Firstly, 'Suppose we leave the service, it would not be right or just that you should keep our subscriptions'; and it is agreed that, on leaving the service, the member's own subscriptions shall be returned to him without interest. Secondly, 'What is to happen if we die before reaching the pension age? My wife and family ought to have

RETIREMENT OF PUBLIC EMPLOYEES

nues—a highly important matter discussed at length in Chapter XV, pages 325 and 337, has sometimes been considered part of the question of contributions. The only relationship

the benefit of the fund'; and so it is agreed that in case of death before the pension age, the employee's and his own subscriptions shall be returned without interest, or his own subscriptions with compound interest shall be paid over, or both his own and employee's subscriptions with compound interest shall be paid out. Thirdly, 'Suppose a man has to retire through ill health before the pension age, what is to be done for him?' Well, he might be treated in the same way as if he died; or he may have his pension according to scale. Fourthly, 'But then a man might die directly he reaches the pension age, or after he has only received his pension for one year; it would not be fair to his family that all his subscriptions for a lifetime should be left in the fund.' And so it is agreed that if a member dies before his pension receipts amount to what he has paid, the balance shall be paid to his family."

In contrast with Mr. Manly's statement, the following extract from the Seventh Annual Report of the Carnegie Foundation for the Advancement of Teaching, p. 63, New York, 1912, is interesting.

"The following statements contain the principles that experience has shown to be worthy of particular attention in the case of those organized industrial pension systems:

1. The pension system, if undertaken, should be adopted solely as the ground of the benefit to those in employment, and with no ulterior purpose.

2. The pension system should be on the contributory plan, maintained at the cost of the company and of the employees.

3. The management should be in the hands of a board composed of representatives of the company and of the employees. In many cases an outsider will be a useful member.

4. The sum paid in by any employee should be returned with a moderate stated interest in case of his resignation from the service before the pensionable age or in case of his dismissal. In case of his death before the pensionable age, this sum should be returned to his estate.

5. No step should be taken in fixing the rates of benefit except upon expert actuarial advice.

6. Since no actuary can tell in advance exactly what will occur, the rules of the pension fund should require an examination at stated intervals, and the conditions should reserve the right to the representative board to make such changes as experience may show to be necessary in the interests of all."

"The benefits so far considered have been of a subsidiary character. Returns of contributions are excrescences, devised to meet the grievances which the employees think exist when everything is forfeited on death or withdrawal before entering on pension. These grievances are more imaginary than real, because, if no return be made, more

CONTRIBUTORY SYSTEMS

is that if contributions are paid, a fund is perhaps more likely to be established, and if once established, the absence of a proper actuarial reserve basis slowly but surely becomes apparent and reform becomes imperative. A non-contributory system could be operated on an actuarial reserve basis, and the second English experiment with a contributory system for civil employees of the central government was operated on the assessment or cash disbursement basis for a number of years.²

Cost of Benefits Not Affected. So far as the cost of the benefits is concerned, the question is practically of no importance. From the point of view of the actuary, the matter of who pays for the benefits is of consequence only in so far as payment by the government might cause some employees to take an advantage of the system which they would not take if the money to pay for it had to come out of their own pockets or the pockets of their fellow employees. In technical language, payment by the government might introduce an element of selection against the system which would be absent if the employees paid for the benefits. The area within which such selection might operate is probably small and the point can hardly be regarded as constituting any fundamental difference between the two types of systems.

Economically Unimportant to New Employees. To employees who enter the service after the establishment of the system—the only class now being considered—the question is theoretically of little economic importance. Under the contributory system candidates for the public service are offered a certain rate of pay subject to certain deductions made to

funds will be available for the pensions; and, in the prospect of higher pensions should they maintain their membership, the employees will receive compensation for all they pay in.”—George King, “On Staff Pensions,” *Journal Institute of Actuaries*, April, 1905, Vol. XXXIX, p. 157.

² For a discussion of this experience see pp. 81 to 84.

RETIREMENT OF PUBLIC EMPLOYEES

meet, in whole or in part, the costs of the benefits conferred by the retirement system. They know the exact amount of cash they will get on pay day and they know how much will be withheld for benefits. Under the non-contributory system they are offered a certain amount of cash to be paid on pay days and certain benefits under the retirement system in event of the happening of certain contingencies. They may or may not know what their benefits are worth. If the true consideration for the services rendered is the same under either system,—in other words, if the amount of cash actually paid into the hands of the employee to do with as he will, added to the present value of the benefits to be paid under the retirement system as the result of the services rendered within the period covered by the pay day, gives the same sum under either of the two systems,—the question of whether the employee shall be paid a higher salary with deductions or a lower salary without deductions becomes, from the point of view of the theoretical economist, a mere matter of form.

General experience tends to show that under a non-contributory system, the value of the retirement benefits, or perhaps more exactly speaking, their supposed value, is as a matter of fact, taken into consideration in determining the amount of salary which will be attached to a particular position. Legislators and administrators will naturally rely in part on the attracting power of the promised benefits in getting the men they want at the salaries they offer.³ Candidates

³ The following quotations tend to show what was the practice under the non-contributory system for British Civil servants:

"My Lords proceeded to consider what class of public servants admitted by certificate, and in receipt of day pay or weekly wages, can be fairly considered to come within the denomination of being engaged in the permanent Civil Service of the State in an established capacity [and hence, under the law, entitled to free pension benefits].

"The true test of this appears to be a permanence of service which, while leaving untouched the power of dismissal for misconduct, establishes at the same time such a mutual relation between the employer and the employee that a portion of the full market value of the labor, in the form of weekly wages, is forgone for the sake of steady employment and the prospect of being provided for in old age.

CONTRIBUTORY SYSTEMS

for the positions will naturally consider the benefits in entering the competition for vacancies; men who would not com-

"When a laborer receives a full market rate of wages on employment of a fluctuating or temporary nature, there can be no reason why the State should make him a present over and above of a retiring pension which he would not obtain from any other employer.

"On the other hand, when the employment is of a permanent character, it is often for the mutual advantage of the State and its workmen that they should receive the fair price of their labor, partly in the form of present wages and partly in that of provision for the future, to accrue in case of retirement caused by ill health or old age, after a certain number of years' service shall have established a permanent connection.

"These principles have been already acted upon in the dockyards and other public establishments, and it only appears to be necessary to apply the provisions of the Superannuation Act to the existing practice with some slight modifications."—Treasury Minute, dated 6th December, 1860, quoted before the British Royal Commission on Civil Service Superannuation—British Parliamentary Paper, 1903, Vol. XXXIII, p. 99.

How the "market rate of wages" under this Treasury Minute was defined is indicated by the following testimony given by Sir A. L. Haliburton before the Woolwich Arsenal Committee. (British Parliamentary Papers, 1889, Vol. XVI, p. 26.)

"A question did arise as to the class of persons employed on day labor in the Royal Factories and other War Office Departments, and it was finally decided by the Treasury on the 29th August, 1861, under the powers granted by Section 2 of the Act, that no man in receipt of the full market rate of wages should get superannuation in addition. I think I have explained to the Committee why that was, because practically the government would be paying about 10 per cent more than anybody else for corresponding labor. A question arose as to what the full market rates meant. It was found impossible to name any given rates as a fixed standard of market rates, because wages differ in different trades and in different localities, and varied from time to time in the same trade and in the same localities. It was, therefore, decided on the 17th December, 1861, that the rate of wages paid at a station at which men are found willing to engage themselves for employment must be taken at the full market rate, it being optional with the men to accept or refuse such wages."

Sir Francis Mowatt, Permanent Administrative Secretary of the Treasury, testifying before the British Royal Commission on Civil Service Superannuation (page 146, questions 4058 to 4060), gave the following evidence:

4058. "Now in fixing the scale of pay of your different servants, you necessarily have some regard to the advantages secured by that annuity?"—"Yes." 4059. "Is it done on strict arithmetical calculation?"—"No." 4060. "Have you any rough estimate of what the value is?"—"I am afraid I can hardly say even that. The circumstances of the particular office, the circumstances of even particular

RETIREMENT OF PUBLIC EMPLOYEES

pete for the salary alone will compete for the salary plus the promised benefits. If the legislators and administrators could accomplish the probably impossible, and could fix the actual cash salary at the point at which it would have been fixed had no "free pensions" been offered, their action would be equivalent to increasing salaries; and economic forces would tend to bring in new competitors who would not have considered the position for the salary without the benefits. The real incidence of the cost of the benefits cannot in fact be fixed by the simple device of providing in the law that the cost shall be paid in whole or in part by the one party or the other. The kind of employees secured in an honestly

men, make it difficult to apply any definite rule. I do not think I can go nearer than this, that of late years when we have moved men from the non-pensionable part of the Service to the pensionable part of the Service, we have usually reduced their pay by something under 10 per cent. But I must explain to the Commission that that does not mean a permanent reduction of 10 per cent throughout their service, but only this—that so long as they are in the particular class to which they are transferred, that deduction is continued. When they are promoted, say from the third class into the second above them, that deduction terminates so that, practically, it is very much under the 10 per cent."

The testimony of Sir J. McDougall, given before the British Royal Commission on Civil Service Superannuation (p. 138) regarding the practice of the London County Council, is also in point.

3803. "Have you any reason to doubt that you get clerks and other officials at the market rate?"—"There is great competition to get in the County Council Service." 3804. "But you have no reason to believe that the salaries are less in consequence of the system now existing of the County Council's giving a contribution?"—"I must say that whenever salary is considered, the question is mentioned, 'Is he entitled to a pension or not?' I presume that has something to do with it, but I do not think it has to do with fixing the salary perhaps in the first instance, but it has to do with increasing it."

That the same tendency operates in the United States is apparent from the following extract from the 10th Report of the Carnegie Foundation for the Advancement of Teachers, New York, 1915, p. 33.

"There is noticeably in these institutions a tendency to hold instructors or assistant professors by the help of a pension. A younger man offered a salary of two or three hundred dollars more at another institution declines it, because he hopes thirty years later to receive a pension, but does not take into account the fact that the difference of salary in this interval would have paid the pension several times over, provided it had been saved."

CONTRIBUTORY SYSTEMS

competitive system will depend not solely on the actual money wage paid into the hands of the employee for immediate use, but upon the general conditions of service, of which the actual immediate wage forms but a part, though, of course, a highly important part. Since better conditions draw better men, economic forces tend to place the ultimate burden on the employee; if the government attempts to carry it, the result in the long run is an equivalent improvement in the type of employees secured. So far as the real or ultimate incidence of the burden is concerned, it is, therefore, of comparatively little importance whether the system be non-contributory or wholly or partially contributory.⁴

⁴ "Aside from moral and social considerations, it makes little, if any, difference in the long run whether the public or the teacher pays the cost of the retirement allowance, or what proportion each contributes. This is particularly true in the case of those hereafter entering the profession. In settling the wage, the school authorities will, either directly or unconsciously, take into consideration the cost of the public contribution to the retirement allowance as a real, though somewhat vaguely defined, part of the total wage. In this way the concession of public support would become a factor in each new wage adjustment as certainly and as potently as any other portion of his wage compensation.

"On the other hand, the new teacher facing employment soon comes to look upon his total actual salary as made up of a current salary composed of amounts withheld from his own earnings and invested in savings for him, and deferred payments for service in the form of public contributions to a retirement allowance, to be received at some time in the future, for continuous faithful service. The immediate placing in operation of a retirement system operates to diminish the salary of the beneficiary, but in the long run this is not the case. After a system of this sort has been in operation for some time, the deductions from the employee's salary would so operate as to be largely a nominal affair."—"The Teacher and Old Age," by C. A. Prosser and W. I. Hamilton, Houghton Mifflin Co., Boston, 1913, p. 43.

"The growing demand on the part of employees for pensions is really a demand for higher wages, using the expression 'wages' in this broad sense as the return which the employee gets for his labor. A pension is as much a part of an employee's real wages as are conditions of labor, guarantee of steady employment, board and lodging (where these are included), medical attention, half pay in case of sickness, and other factors not included in the actual money wages received. Theoretically, the simplest way of dealing with labor would be the payment of a money wage, requiring the employee to provide

RETIREMENT OF PUBLIC EMPLOYEES

The practical economic differences are first that under the contributory system the employee knows the cash value of the benefits and is less likely to attach to them a value beyond their real worth, and second, that he is more likely to maintain a spirit of independence in his dealings with the government.

Contributions
Disclose
True
Nature of
System

Of Moral or Psychological Importance Mainly. The differences in the moral and psychological effect produced not only on the employees, but also on the government as an employer and on the general public, are, in fact, the essence of this question of contributory vs. non-contributory systems. Operated on the contributory basis, the retirement system loses the color of charity and philanthropy. The government as an employer is led to see more clearly the rights and interests of the employees and can less easily treat a movement for a change in the system as an act of base ingratitude. The employee can take the benefits in precisely the same attitude that he takes his salary or the insurance coming to him on the maturing of a policy, something that he has bought and paid for.⁵ The

for the hazards of employment and his old age. While here and there an employee does this, . . . the mass of the employees do not."—"Pensions as Wages," by Albert de Roode, *American Economic Review*, Vol. 3, part 2, June, 1913, p. 287.

"There is a tendency to speak of these pensions as being paid by the company, or, in cases where the employee contributes a portion, as being paid partly by the employer and partly by the employee. In a certain sense, of course, this may be correct, but it leads to confusion. A pension system considered as part of the real wage of an employee is really paid by the employee, not perhaps in money, but in the foregoing of an increase in wages which he might obtain except for the establishment of a pension system."—*Idem*, p. 288.

See also the extract from "Teachers' Pensions in Great Britain," by Raymond W. Sies, given in the foot-notes on page 104.

⁵ "A retirement system, designed to advance the efficiency of teaching, while at the same time preserving as far as possible the self-respect on the part of those participating therein, should be supported in part by contributions from the prospective beneficiaries. Such a system then becomes in effect a form of compulsory insurance against loss of earning power due to old age, toward the cost of which the state makes partial contributions."—Mass. Board of Education, *Special Report on Teachers' Retirement Allowances*, January, 1913, Massachusetts House Documents, 1913, No. 1926, p. 5.

CONTRIBUTORY SYSTEMS

greatest difference, however, is in the attitude of the general public.⁶ In times of great financial stress, for example, in the period that immediately follows a war, an outcry is likely to be raised against a non-contributory system because the government can no longer afford to be so generous. On the other hand, if the employees are paying heavy deductions from salary toward their own retirement, any proposal for a serious curtailment of the benefits appears in its true character, as a proposal, not to curtail a charity, but to reduce compensation. The contributory system promotes clear public thinking.⁷

⁶ The difference in the attitude of the public toward the two types of systems is perhaps revealed by the two following quotations:

"But as far as the Pension List applicable to the Civil Service of this country [England] is concerned, I think the objection to it is based upon a misapprehension. I regard the pensions so granted as being part of the engagement of service. I regard them as a system of compulsory thrift, enforced by the state upon its servants. They are deductions from the salary of servants, and they are taken into account when they accept their position."—Right Hon. Joseph Chamberlain, M.P., Addressing the Conference of Elementary Teachers at Birmingham, 1889. Quoted in Memorial of Civil Servants, addressed to the Treasury.—British Parliamentary Papers, 1899, Vol. LXXVIII, c. 48.

"Until recently, the various civil pension systems which have been proposed as furnishing a remedy have each, when analyzed, been open to such grave objections that they have met with deserved disapproval. Of late, however, those interested in securing retiring pensions for the civil employees of the United States have been more and more recognizing that the main purpose of a civil pension system is not to provide pensions, but to improve the efficiency of the civil service by means of pensions; not to create a large body of dependents supported at the public charge, but to enable, under government supervision and care, the efficient members of its administrative staff to make, mainly at their own expense, sensible provision for their old age; not to foster retention of the mediocre till the retiring age, but to strengthen the beneficent effect of the Merit System by furnishing additional motives for industrious and able men in the government employ to remain there; and not to hinder, but to accelerate the removal of the lazy or the indifferently good among the civil servants: in a word, to vitalize and energize the civil administration of the government by raising the general standard of efficiency.—"Civil Pensions for Federal Employees" National Civil Service Reform Association, New York (?), 1909, p. 6.

⁷ "Quite naturally, in view of the history of pensions, the 'straight pension' from the State is the first goal of the teachers' efforts. But as today viewed by the best students of social insurance, the straight

RETIREMENT OF PUBLIC EMPLOYEES

Promote
Intelligent
Management

Intelligent management of the system and interest in its operation are, moreover, promoted by the contributory system. The payment of contributions, as has been noted before, tends toward the establishment of a fund and ultimately to its operation on an actuarial reserve basis, and toward the reduction of any element of selection by the employees against the system. If the employees are formally represented on the managing board, as they generally are under contributory systems, the result frequently is a more general understanding throughout the service of the problems involved.

Check
Tendency
Toward
"Pension
Graft"

That the contributory system naturally acts as a check on the tendency toward treasury exploitation is perhaps its greatest merit. After the principle of contributions has become firmly established, general demands for increases of benefits, or for small changes in conditions, which will increase the cost, are less likely to arise if the burden of paying for them will fall in part at least on the employees. A movement for the abolition of contributions may of course arise at any time, but this issue when raised is large and clear-cut and is likely to be given the consideration that it deserves. It should, perhaps, be noted here that a change from the contributory to the non-contributory system, representing as it does an increase in compensation, may be made without incurring the ill will of the force; whereas the introduction of a contributory system after a non-contributory system is exceedingly difficult unless salaries are sufficiently increased to enable the employees to pay the contributions.

Contributory System More Flexible. As will be explained more at length in subsequent chapters, the cost of retirement benefits is greatly influenced by such personal factors as an

pension from the State is like the unwise charity which suggests the parody, it is twice cursed—it curseth him that gives and also him that takes.”—

David Snedden, Commission of Education of Massachusetts in Introduction to “The Teacher and Old Age,” by Charles A. Prosser and W. I. Hamilton, Boston, Houghton Mifflin Co., 1913, p. 10.

CONTRIBUTORY SYSTEMS

employee's sex and age at entrance into the service. If, for example, the conditions governing the grant of a superannuation benefit are based on age, the cost per dollar of benefit allowed, when distributed equally over the whole period of service, is much lower for the young entrant than for the old and is generally lower for a man than for a woman. The tendency is distinctly towards recognizing these differences in cost and regarding cost as the measure of equality in the treatment accorded different employees. Under the non-contributory system differences in cost can only be met by varying the amount of benefits, unless the government chooses to spend more in proportion to wages for him who serves it but a short time than for him who serves it all his working years. Under a contributory system these variations in cost arising from personal differences can be met in two ways, not only by adjusting the amount of benefit, but also by varying the amount of the employee's contributions. The contributory system, in addition to the moral and psychological advantages, has the merit of being more flexible.⁸

FOUR PRINCIPAL OBJECTIONS TO CONTRIBUTIONS

Numerous objections have been advanced against the contributory system. They may be briefly summarized as follows:

The
Objections
Enumerated

First is the argument that it was tried for many years in the British Civil Service and abandoned in favor of the non-contributory system.⁹

⁸ For a discussion of the proposal to have the government make equal contributions for all and to have the employee pay the balance necessary to procure the benefits in his individual case see p. 97.

⁹ See 19th Report of United States Civil Service Commission, p. 28.

Mr. Miles M. Dawson has used the historical argument more broadly in his criticism of Mr. Herbert D. Brown's plan of a savings and annuity system for the retirement of the superannuated employees of the Federal Government. Mr. Dawson's statement is as follows:

"The chief argument which is presented in favor of the methods now being specially urged, viz.: of a pension wholly contributory,

RETIREMENT OF PUBLIC EMPLOYEES

Second is the argument that it is not in the interest of the government. Persons advancing this argument point out that a contributory system leads to the introduction of some benefits that are contrary to the interests of the government and of others in which the government has no interest, and that the result of the inclusion of such benefits is to increase the cost of the system and to diminish the control which the government has over its employees. The benefits cited as being against the interests of the government are the right to withdraw contributions in the event of voluntary resignation, which is said to put a cash premium on resignation, and the right to something in event of dismissal. The benefits in which the government is regarded as having no interest are benefits in the event of death, either in the active service or soon after retirement.

Third is the argument that it is contrary to the interests of the employees because their salaries are already so low that they cannot stand deductions, which are very unpopular and produce discontent.

The final argument is that it necessitates the introduction

but with the government making good deficiencies as to those who have not contributed in the past is that 'there is no hope that Congress would do anything beyond that.' It is also urged that it is more in harmony with American individualism and that it is really the best system. The experience in other countries is that even though a contributory system be adopted it is certain, soon or later, to be abandoned and that a system of pure savings is on account of the heavy burden which it imposes and the continuous dissatisfaction on the part of the employees with the returns, really the worst system ever devised. Yet in a new and prosperous country where new theories of government have been tried with much success it is perhaps natural that men should be so optimistic as to believe that plans which have worked badly everywhere else may operate successfully under changed conditions."—"Government methods of providing old age pensions"; In International Actuarial Congress VII, Amsterdam, 1912, Reports, Memoirs and Proceedings, Amsterdam, 1912, VI, p. 215.

In justice to Mr. Brown, it should perhaps be noted that he has not proposed a pure savings plan, but a savings and annuity plan. The fact that the accumulations under the savings part of the system would be used for the purchase of an annuity, greatly reduces the cost.

CONTRIBUTORY SYSTEMS

of a cumbersome and elaborate machinery, which is entirely unnecessary, because the ultimate economic incidence of the cost cannot be affected by it, for the incidence is determined by the laws of supply and demand.¹⁰

Each of these arguments deserves careful consideration.

Failure in English Civil Service. The contention that all contributory systems are doomed to failure because a contributory plan was twice tried in the English service and was both times abandoned seems hardly sustained by the facts.¹¹ On both occasions the contributory system was introduced to

The Facts
as to the
English
Experience

¹⁰ A fifth objection was cited by the Commissioners on The Operation of the Superannuation Act of 1857, British Parliamentary Papers, 1857, Vol. XXIV, p. xiv, as follows:

"Another objection to the system [of contributions] is that it necessarily raises questions as to the sufficiency or insufficiency of the superannuation allowances considered as an equivalent for the deductions paid, and this not only with reference to the whole service, but with regard to particular departments or even individual cases. For example: it is a complaint in the Post Office, that as it is found that in that department a much larger number of officers voluntarily retire in course of their service than in most other branches of the public service, the result is that the deductions levied are supposed to be much more than an equivalent for the superannuation granted. In a similar manner, individuals complain that they are compelled to pay deduction, although from special circumstances there is little or no change of their ever deriving benefit from superannuations. Were the simple and more straightforward system adopted of engaging public servants at a certain net amount of salary without a conditional prospect of a superannuation on certain terms, all these causes of misapprehension and complaint would be entirely removed."

The act of 1834 provided for uniform deductions of $2\frac{1}{2}$ per cent for all employees receiving not more than 100 pounds a year and of 5 per cent for all employees receiving over 100 pounds. It failed, moreover, to recognize many of the equities.

A modern equitable contributory system on the actuarial reserve basis would vary the contributions according to the employees age at entrance, sex, and, sometimes, occupation. This objection is, therefore, against a type of contributory systems and not against the principle of contributions.

¹¹ For the facts in general, see Report of the Select Committee on Civil Service Superannuation, 1856, British Parliamentary Papers, 1856, Vol. IX, especially the testimony of Sir C. E. Trevelyan, Assistant Secretary of Treasury, pp. 14, 15 and 16, and of R. M. Branches, p. 106.

RETIREMENT OF PUBLIC EMPLOYEES

take the place of a non-contributory system, as a measure of economy without any offsetting readjustment. In other words, it was a reduction of compensation. In the first case, existing active employees who had entered the service under an agreement including the payment of a non-contributory pension, were compelled to contribute without any additional allowance. They argued that it was a breach of their contract of employment, and Parliament, accepting this view, repealed the law and required the return of all contributions. In the second case, the vested rights of the employees already in the service were recognized, not only in respect to the salaries they were then receiving, but in respect to all increases of salary they might ever receive. They were forever exempt from deductions. Deductions were made solely from the salaries of new entrants, and the amount of pensions to be allowed new entrants was reduced. Men were thus working side by side, some entitled upon retiring to a large pension for which they were contributing nothing, while others were entitled upon retiring to a smaller pension for which they were forced to contribute through deductions from salary, and the only difference between the two classes was that the former were appointed before a given date and the latter after. The salary deductions from the new entrants were not formed into a fund to accumulate at interest to provide for the benefits of those who had contributed, but they were used immediately to pay the pensions of persons already on the retired list who had never paid contributions. The contributions were not an actuarial basis, and the employees believed very generally, though, as it afterwards appeared wrongly,¹² that if the contributions had been funded, they would have been more than sufficient to purchase all the benefits granted. In other words,

¹² See Supplemental Report of Commissioners in the operation of the Superannuation Act (British Parliamentary Papers, 1857-58, Vol. XXV), which contains the report of the actuaries, Ansell and Morgan, to the effect that the $2\frac{1}{2}$ and 5 per cent deductions under the Act of 1834 would not, if funded, have been sufficient to pay the pension claims.

the employees believed, with some very good authorities to support them, that the government was making a profit out of them. No provision was made for a return of contributions in the event of death in the active service, and, in consequence, cases were not lacking where an employee on his deathbed would send his wife to collect the last salary payments due him and she would get the salary minus the deductions to provide a superannuation benefit. The English treasury department had a file of letters from widows who had vainly tried to get back their husband's contributions to "the fund,"¹³ not knowing that although everyone spoke of "the fund," it did not exist and that the contributions were used, when collected, to pay the pensions of those already retired. The ministry which devised the scheme had not conceived of contributions as a part of an ideal retirement system; their object had been to create a special tax on government employees as a revenue measure, a procedure which they regarded as less objectionable than a reduction of salaries.¹⁴ To

¹³ See testimony of Sir C. E. Trevelyan, Assistant Secretary of Treasury, before Select Committee on Civil Service Superannuation, 1856, British Parliamentary Papers, 1856, Vol. IX, questions III and III2, p. 14.

¹⁴ Sir J. R. G. Graham, who, as representative of Lord Grey's Government, introduced in Parliament, the Act of 1834,—the second English experiment with contributions—gave the following testimony before the Select Committee on Civil Service Superannuation, 1856 (British Parliamentary Papers, 1856, Vol. IX), Question 2909. "Supposing a special fund had been created, and it had happened that the payments to that fund were more than enough to meet the charges upon it, would it not have appeared equitable either to increase the payments to the civil servants, or to reduce the payments which they made to the fund?—That is not the view that I took at the time, or that I now take. I think that the deduction then made prospectively was such as would not only cover the payments to be made to the individuals, but would diminish the deadweight charge for superannuations generally; and that of course was taken in preference to a larger reduction of salary, which would have been made had not the provisions stood as they now stand in the Act of Parliament," p. 286.

Question 2923: "Then was it to be an insurance for the benefit of those who paid the deductions, or was it to be an insurance for the benefit of those who did not pay them; were persons who did not pay the deductions to have the benefit of them in any way?—I will en-

RETIREMENT OF PUBLIC EMPLOYEES

cite this legislation of the period 1820 to 1830, when the application of actuarial science to the problem had not been developed, as proof of the inevitable weakness of a contributory system, is, to say the least, not conclusive. In fact, the general tendency in England at the present time is toward partially contributory systems, and from the evidence available one would judge that if it were possible to start over again the English government would adopt a partly contributory system for its own employees.¹⁵

The Death Benefit

Against Interests of Government. That the contributory system leads to the repayment of contributions in the event

deavor to state to the Committee what I remember as the principle of the deduction; that in lieu of making a large reduction of salary, there was a deduction made in the nature of contributions for superannuation, which was so large as not only to cover the individual claims of all those who contributed, but which would operate in diminution of the charge for superannuation generally. Whether that were strictly equitable or not, I will not presume to say, but that was the intention of those who introduced it. It was not concealed from Parliament, and it was adopted by Parliament, and all those who have contributed have done so under ample notice; they entered the public service well knowing that there were contributions and these terms would be exacted," p. 287.

¹⁵ The National School Teachers' (Ireland) Pension Fund (1879); The Elementary School Teachers' Deferred Annuity Fund (1898) and The Scotch Teachers' Superannuation System (1911) are all partly contributory as is the fund under the Police Superannuation Act of England and Wales (1890). The following municipalities have established partly contributory systems, London (1907), Liverpool (1893 and 1912), Manchester (1892), Edinburgh (1906), Bradford . . . , Newcastle on Tyne (1904), Croyden (1893 and 1904), Halifax (1911), St. Helen (1911) and Booth (1899).

Prosser and Hamilton say: "In the early schemes for the protection of teachers in many European nations, straight pensions were given as a gratuity or bonus by the state without the payment of any dues or assessments, whereas, all the later ventures provide for the joint support by the public and the school master. This is the pronounced drift on the other side in all recent laws relating to old age or disability insurance. Even Germany, after having granted pensions to teachers entirely at public expense, has in recent years based her entire program of social insurance upon the idea of the compulsory assessment of all who were to be protected by the numerous successive and progressive laws which have been adopted."—The Teacher and Age, Boston, Houghton Mifflin Co., 1913, p. 20.

CONTRIBUTORY SYSTEMS

of withdrawal and in the event of death in the active service or soon after retirement is, of course, perfectly true, and such benefits must inevitably increase the cost of the system. Demands for the payment of a benefit in the event of death will arise, however, under a non-contributory system. The employees will take the position that the benefits under a retirement system are in the nature of deferred pay and are earned by the employees. The average employee will desire that his deferred pay shall be applied to protect him from all the common dangers of life and not solely to protect him from those which are of immediate concern to the government as an employer, because he has others dependent upon him and early death, before he has raised his children, is a more obvious and threatening danger than inability to provide for his old age. In the absence of any provision in event of death, cases of extreme hardship will arise and some action will be necessary to allay the resulting dissatisfaction. The general tendency of the times, moreover, is toward widows' pensions and other systems of social insurance so that a demand for a benefit in event of death would receive a good deal of popular support. It may be safely concluded, therefore, that any retirement system at the present time would have to include some death benefit. The question of the exact nature of the death benefit is discussed in Chapters VIII, IX and X.

The degree to which the payment of a benefit in the event of withdrawal, due either to voluntary resignation or to dismissal, is objectionable, is discussed at length in Chapter VII. It is there pointed out that such a benefit is, to say the least, not wholly against the interests of the government. If a man becomes inefficient from causes which will not justify a retirement allowance under the rules, the administrative officer may hesitate to dismiss him, if dismissal means not only loss of salary but also loss of the accumulated provision for old age. If on the other hand in the event of a resignation, quietly suggested by the proper authority, the employee will receive either the reserve accumulated to pay his superannuation bene-

**The Benefit
on Resigna-
tion or
Dismissal**

RETIREMENT OF PUBLIC EMPLOYEES

fit or an equivalent annual allowance, the administrator might well be far more ready to act. A broad public policy would seem to require the preservation, in so far as possible of the mobility of labor, and certain branches of government work could doubtless be greatly improved by making it easier, instead of more difficult, for a young man to pass from the service of the people in one organization of government to the service of the people in another. The man who is a conspicuous success, for example, in the administration of a given department of a small city should be encouraged to seek a similar field in a larger city where his abilities can be further developed through experience and be made more broadly useful. The remedy for the selection against the government, whereby many of its promising men are drawn off, is not to be found in imposing irritating penalties against resignation, but by improving the general conditions of the public service, by increasing its attractiveness as a profession.

Provision
for Family
of Dis-
missed
Employee

To allow to the family of an employee who is dismissed the benefit which would have been his had he resigned voluntarily, is a procedure which, as set forth in Chapter VII, has distinct merits. It removes one of the motives for leniency which an administrator has in dealing with cases of moral weakness, the commonest type of which is probably periodical drunkenness. In such cases, the inclusion of a benefit on dismissal is of real value to the public, because it gives the dependents something with which they may tide over the almost inevitable period of unemployment which follows dismissal.

Dis-
ciplinary
Control

The argument that it weakens the control of the administrators over the employees is also considered at length in Chapter VII. It is probably enough to say here that administrators and appointing officers already have sufficient means of control through the powers of promotion, demotion, furlough and dismissal. Until the merit system of appointment extends to the higher positions in the public service more generally than it does at present, and until the actions of appointing and ad-

CONTRIBUTORY SYSTEMS

ministrative officers are better subjected to review, the problem is less to strengthen their control than to protect efficient and expert subordinates from the politically appointed higher officials. The avenue of escape through resignation should not be obstructed with barriers of financial loss.

Against Interests of Employees. The argument that the contributory system is not in the interest of the employees because their salaries are too low to permit payment of the deductions and because they do not like to pay them is largely based on experience in dealing with existing employees, a class which has to be considered after a satisfactory and practicable scheme has been devised for new entrants. So far as future employees are concerned, the argument, on examination, seems to be of little weight. If the salary offered for immediate payment, after deductions for a minimum provision for the various great dangers of life have been made, is too low, suitable candidates will not apply if they can find better terms elsewhere; and the government as an employer will have either to lower its standards for employees or pay higher salaries.¹⁶ Either course would indicate that its past salaries

The Low
Salary
Argument

¹⁶ The following extract from the Report of the Commissioners on the Operation of the Superannuation Act (British Parliamentary Papers, 1857, Vol. XXIV, p. XXI, is worth quoting because it deals with an argument frequently advanced in considering salaries for public employees:

"It is sometimes argued that no doubt even exists as to the sufficiency of the existing salaries, inasmuch as Civil appointments are eagerly sought for, and no difficulty is experienced in finding candidates for them. We doubt whether such a question can be so summarily disposed of. Even if salaries were still further reduced, we doubt whether there would be any lack of candidates for appointment and for some time there might be no deterioration in the qualifications of the applicants as, without scanning the terms of engagement very nicely, there would be a reasonable expectation that the government of the country would not fail to provide due remuneration for useful service. But if an impression was once allowed to prevail, that public servants were treated with unfairness, and their remuneration awarded in a niggardly and parsimonious spirit, although there might still be an abundant supply of candidates, we cannot help fearing that the public service would suffer from a

had been insufficient to enable the ordinary employee of that type to maintain his standard of living and at the same time to make such provision against future contingencies as the legislative agency, in establishing the retirement system, believed he should make, not only to protect his own interests, but to protect his employer from losses through disability and superannuation. The new entrant could be seriously damaged only in case the government position was the best he could get and he was forced to provide for the future by spending in the present less than the minimum amount required for maintaining a reasonable standard of living. The government in such a case should doubtless raise the compensation, for, even if it were charity, a payment somewhat above the market rate for such service, it would be preventive charity applied at the source.

Objections to Contributions

The chances of objections to the mere payment of contributions are very remote, if the contributions are withheld from the salary and are never actually paid to the employee and if the general interests of the employee are consulted in planning the system.¹⁷ According to the English experience objections to contributions have generally accompanied objections to other features of the system or have come from employees already in the service who felt economic pressure or

deterioration, as well in the qualifications of the applicants, as in their subsequent conduct when appointed. . . .

"It appears to us that in the public service, no more than in private undertakings, can the number of candidates who may be seeking employment be considered as any criterion of the sufficiency of the salary. In both, the salary ought to be such as to command the requisite ability and character and also such as may be sufficient to maintain the servant in that position of life in which it is desirable, with a view to the interests of his employees, that he should be placed."

¹⁷ "Do you think that the men would object to a contribution of that amount ($2\frac{1}{2}$ per cent) if the pension were secured to them? No, I have never heard the men complain of it, in fact it is stopped, we do not receive it; it is deducted from the pay."

Mr. Chambers, a constable, testifying before the Select Committee on Police Superannuation Funds, British Parliamentary Papers, 1875, Vol. XIII, p. 104, q. 2580.

CONTRIBUTORY SYSTEMS

who believed that forcing them to pay contributions was an impairment of their contract.¹⁸

The objections raised in behalf of the future employees seem, therefore, of little weight as compared with the great advantage that the employees derive under a contributory system from the fact that they are not so open to attack from members of the legislative body, or from some members of the general public, on the ground that they have a "pension graft." To the great number of self-respecting, industrious employees who have secured public positions through open competitive examinations, no one is more irritating than the politician who seeks to strike a popular chord by describing present-day civil employees in terms which were applicable to the general type of employees that the politicians gathered together under the spoils system. American public servants not only have to withstand certain corrupting influences that have survived from the old system, but they have to live down the reputation made by their predecessors. In America, therefore, the public employees have a far greater interest in securing a contributory system than have civil servants abroad, where government employees occupy a much higher position in public confidence.

Employee
Protected
by Contri-
butions

Expensive to Administer. The final objection against the contributory system, that it necessitates an elaborate machinery for collecting contributions, or, more properly speaking, for withholding contributions from salary payments, will have to be admitted, and it must also be admitted that the ultimate incidence of the costs of the retirement system will depend on the operation of general economic laws and not on the decision as between a contributory and a non-contributory system.¹⁹ Even under a non-contributory system properly con-

¹⁸ The question of the payment of contributions by present employees is considered more at length in Chapter XIII.

¹⁹ "Differences of practice in different countries in the matter of exacting contributions from teachers in support of public pension systems in their favor raises an important issue in the economics of

ducted, however, a fairly elaborate system of records is required, if the government is to have complete knowledge of

teachers' pensions. Throughout Germany, with the exception of Bavaria, teachers pay no contributions whatever; in France heavy retents from salaries are universal. Practice in Great Britain represents a compromise between these extremes, since the contributions on the whole are moderate in amount. In the United States small contributions are usually required. Except for a period of years following the introduction of a substantial pension system, the writer distinctly favors the German practice, in view of its simplicity and administrative economy, because contributions or retents are not necessary in the long run to secure the perfectly legitimate end sought, viz.: partial or complete support of the pension system by the beneficiaries. The writer is firmly convinced that even in the case of an entirely non-contributory pension system, economic forces definitely tend to throw the whole burden of support upon the beneficiaries in so far as the pensions are really desired. To the extent that teaching positions or any other are rendered more attractive by the provision of pensions, the compensation in the form of salary of any given grade or quality of services gradually adjusts itself to the present value of the claim to a pension so that the total compensation in the long run is not materially affected, other conditions remaining the same. This adjustment takes place chiefly through the failure of the salaries to increase as they otherwise would rather than through actual reductions. The whole process is simply a readjustment of economic forces whose equilibrium has been disturbed by the introduction of the pension system. The process of equilibrium ordinarily requires a considerable period of time and for that reason the inauguration of a pension system with regular contributions is often justifiable, provided the contribution decrease in amount on a sliding scale through a period of years until they disappear."

"The whole argument may be summarized in the two principles; (1) that pensions granted on condition of service are a part of wages or salary in the form of deferred payment, and (2), that the material rewards of teachers are controlled by the same economic laws as those of other workers," p. 72.

"If the preceding arguments are sound, the requirement of contributions as a permanent feature of a teachers' pension system serves no useful purpose. Not only so, but the proper abolition of the contributions is a distinct economy, since they introduce needless complexity, are a source of constant irritation and misunderstanding, and are responsible for a vast amount of unnecessary bookkeeping and other clerical work. They represent thus a definite waste of time, money and energy. On these grounds the gradual elimination of the contributory features of the present British pension system for teachers, and without any reduction in pensions, would be a distinct advantage. As a permanent policy, the German practice is the correct one. The writer has no disposition to criticize the requirement of contributions as an initial temporary feature. This is considered per-

CONTRIBUTORY SYSTEMS

and control over the liabilities that are accruing under the system and if each succeeding generation of taxpayers is to pay its own bills for services rendered. Given an adequate and complete machinery for an equitable non-contributory system, comparatively few extensions will probably have to be made to make it provide for contributions, even where rates of contribution are varied for different ages, sexes, and classes. One of the special merits of the contributory system is that it operates to impel the establishment of a proper actuarial system, whereas a non-contributory system can go on indefinitely on an improper basis provided that taxpayers are somnolent. Even if the actuary working with the disbursing officials of the government should find that the expenses of administration were somewhat increased by a contributory system it would be a grave question whether the advantages to be gained from it on moral and psychological grounds are not more than worth the possible difference.

SUMMARY

Consideration of the arguments against the contributory system tends, therefore, to emphasize the main argument for it, its moral and psychological effect on the government as an employer, on the employees and on the public. The government does not profit from endeavoring to gain an artificial control over its employees or from consulting only its own most apparent immediate objects but from promoting, as nearly as may be, ideal working conditions for its employees. The employees' best interests are in openly contributing for their own retirement privileges so that they may maintain their independence. The public is made to see clearly that the expense of the retirement system is an expense for service, a sort of depreciation charge, and not a charity or a benevolence.

fectly sound, since teachers have no valid claims to the temporary advantages falling to them as a result of the disturbances of economic forces occasioned by the abrupt introduction of a pension system," p. 73. *Teachers' Pension Systems in Great Britain*, Raymond W. Sies, U. S. Bureau of Education, 1913, Pamphlet No. 34, Whole No. 544.

CHAPTER IV

THE WHOLLY VS. THE PARTLY CONTRIBUTORY SYSTEMS AND THE INDIRECT CONTRIBUTIONS OF THE GOVERNMENT

Definition. The Merits and Defects of Wholly Contributory Systems. The Merits and Defects of Partly Contributory Systems. Basis of Division Under Partly Contributory System. Equity as Between Employees. *Indirect Contributions.* Expenses of Management. Guarantee of Solvency. Guarantee of Interest Rate.

Definition. Contributory retirement systems, as was set forth in the preceding chapter, may be classified as "wholly contributory," if all the costs of the benefits are borne by the employee and as "partly contributory," if part of the cost is borne by the government and part by the employee. Under either type certain indirect contributions would probably be made by the government in the form of the expenses of operation and certain guarantees. The purpose of the present chapter is to consider the merits and defects of these two different classes of contributory systems, the basis of division of cost under a partly contributory system, and the nature and extent of the indirect contributions of the government.

The Merits and Defects of Wholly Contributory Systems. The wholly contributory system would probably have the maximum effect in preserving the independence and moral stamina of the employees, in protecting the system from political attack and popular disapproval in times of financial depression, and in insuring for each employee full protection of all his interests and equities against any encroachments by the government as his employer, by the general public, or by his fellow employees. It is probably, moreover, the type of system which

CONTRIBUTORY SYSTEMS

would be most readily adopted by legislative bodies having a deeply rooted prejudice against a civil pension list, as the result of unfortunate experience with military pensions.

The principal objection to the wholly contributory system is doubtless the difficulty that is encountered in attempting to introduce it among present employees. Obviously they cannot pay in full for any retirement allowances that may be provided for them in respect to their past services, and, as is more fully discussed in Chapter XIII, they cannot easily pay heavy assessments in respect to their future services, because their standard of living, or customary mode of expenditure, has been based on the receipt of their full salary to do with as they will, and any marked change results in hardships, real in many cases, and possibly imaginary in others. To give to the present employees benefits in respect to future services for which they pay only in part, if at all, while the new entrants are required to pay in full for the same benefits, is likely to cause friction; and later when employees who entered after the establishment of the system become numerous, they are likely to advocate the abolition of contributions, using the precedent of government payments to present employees as a principal argument.

Unless the introduction of a wholly contributory system is accompanied by a partially compensating increase of salaries, it may be argued, apparently with a considerable degree of soundness, that it is equivalent to a reduction of compensation, and that the government is securing the benefits of a retirement system wholly at the expense of its employees. The details of this argument are somewhat as follows: Under the existing absence of system, the employee expects to be retained in the service—and he generally is—so long as he can satisfy the attendance regulations. If this prospect of practically life tenure was not one of the inducements for entering the service, it was in many cases one of the reasons for remaining in it. After the establishment of a retirement system, especially one containing a compulsory age of retirement,

RETIREMENT OF PUBLIC EMPLOYEES

the employee loses this attractive permanency of tenure, and he is practically certain to be out of the active service in the latter part of his life, even if in good health for his age. The average number of working years, or, perhaps more accurately, the average number of full salary years that may be expected by government employees, has thus been shortened in the interests of the government, and it has been done entirely at the expense of the employee and consequently his compensation has been reduced. Unless it can be shown that the increased opportunity for promotion will offset this loss, the argument appears unanswerable.

Consideration of these defects suggests a possible experiment that might be tried in the introduction of a wholly contributory system. The present employees might be continued at the existing scale of salaries, and be given on retirement certain minimum benefits entirely at the expense of the government, as is discussed more at length in Chapter XIII. For new entrants a somewhat higher scale of salaries would be provided with a more elaborate and comprehensive system of retirement benefits, paid for wholly at the expense of the employee by deductions from salary. The actual cash paid to the new entrants would be less than was paid to entrants under the old system, because the new system would provide for them some of the things which under the old system the employees had to provide for themselves. A carefully prepared circular describing the system and giving the reasons for the arrangements should be furnished every employee; in fact, whatever the system, every employee should be fully advised of its terms and announcements of examinations for positions should contain accurate information regarding the important details of it.¹ Under a wholly contributory system, which is introduced by an increase in the salary scale for new

¹ For a striking illustration of the difficulties that may arise from failure to give each employee accurate information regarding his rights under the retirement system see "Report from the Select Committee on Workmen (Woolwich Arsenal) [as to their right to pension]. British Parliamentary Papers 1889, Vol. XVI.

CONTRIBUTORY SYSTEMS

entrants, the fact should be especially emphasized that an increase in scale has been made in lieu of any contribution by the government toward the cost of the benefits provided under the retirement system and is made as a recognition by the government that it expects to reap an advantage from the system and at the same time to confer one on the employees. The object of the procedure would be to conserve to a maximum extent the moral independence of the employee and to insure proper public recognition of the fact that the benefit is part of the employee's compensation. The increase in salary scale would be made as compensation for the sacrifice by new employees of that expectation, which was formerly held out, of being retained to extreme old age if he should be able to be in attendance at his duties. So far as is known, this experiment has not been tried, and the general present day practice is to introduce a partially contributory system.

The Merits and Defects of Partly Contributory Systems. The partly contributory system has certain distinct advantages. It greatly simplifies a proper correlation of the scheme devised for new entrants with that planned for present employees, and it eliminates, or at least reduces, the opportunity for the development of a sentiment that the government derives all the benefits and the employees pay all the costs. In general, it promotes a feeling that the government is coöperating with the employees in the attainment of a common end, and it may even have the doubtful merit of "touching that chord in human nature which responds to the thought of getting something for nothing," to borrow a phrase used by Dr. Pritchett to record certain of his experiences in connection with the non-contributory scheme for college teachers, now being carefully reconsidered by the Carnegie Foundation for the Advancement of Teaching.² One of its real and indisput-

² See their Bulletin 9, "A Comprehensive Plan of Insurance and Annuities for College Teachers," New York, 1916.

RETIREMENT OF PUBLIC EMPLOYEES

able merits is that, if the system contains any elements in the nature of insurance, it facilitates withholding in the event of resignation or dismissal the cost of insurance as is more fully set forth in Chapter VI, page 206.

The defects of the partly contributory system probably depend on the division of the burden between the government and the employees. As the system approaches the non-contributory type, it runs the danger of demoralizing the employee, of incurring popular disapproval in times of financial pressure, and of obscuring the real incidence of the cost, so that the employee does not get full recognition of all his interests. On the other hand, as it approaches the wholly contributory type, it increases the difficulty of coördinating the provisions for present employees with those for future employees, and it increases the danger that the employees will feel that they carry the entire load whereas the government should bear its part.

The Half
and Half
Basis

Basis of Division Under Partly Contributory System. In practice, the division of costs under a partly contributory system has not been based on any principles that could be characterized as highly scientific. The half and half division is the one that is generally adopted, though the government may in some systems pay somewhat less than half, because of profits it derives from forfeitures in the event of resignation or dismissal. The half and half division has two distinct merits; it is simple, and it sounds fair. Scientific division, if it is ever attempted, would probably turn on the degree of interest of the parties in the particular benefits provided. The cost of benefits which are solely in the interest of the employee, such, for example, as a special insurance in event of death in the active service from causes not connected with the actual performance of duty, should apparently fall wholly on the employee; whereas the cost of a benefit in event of death or disability caused by the actual performance of duty should fall entirely on the government as an employer. A superannuation

Division
According
to Degree
of Interest

CONTRIBUTORY SYSTEMS

benefit is partly in the interest of the government as a means of eliminating those who in the absence of a system stay on beyond their days of usefulness, and it is partly in the interests of the employees as a means of providing for those who, even in the absence of a retirement system, are obliged to resign because of the inroads of advancing age. The interest in a benefit for disability not incurred in the performance of duty is probably somewhat the same as in the case of a superannuation benefit. The division of cost could undoubtedly be based on such considerations; and it would also be entirely possible for the system to provide certain compulsory benefits to be paid for by the government and the employee together, and certain optional benefits to be paid for entirely by the employee or by the employee with very slight assistance from the government.

Equity as Between Employees. Another important question regarding the division of cost will undoubtedly demand careful consideration in the future as more and more attention is given to the equities as between different classes of employees. The percentage of an employee's salary which would have to be paid into a fund in order to provide, for example, a retirement allowance of half salary at age sixty-five, would largely depend, as is explained more at length in subsequent chapters, on the age of the employee at entrance into the service. For the employee who entered at a very early age such an allowance could be secured by paying into the fund each year a comparatively small percentage of the employee's salary, whereas for the employee who entered at a relatively late age, the payments into the fund would reach a very high percentage. The tendency in developing retirement systems is probably toward recognizing this difference in cost and toward adopting some device for promoting greater equality of treatment by varying either the rates of contributions or the amount of the benefit, or by combining the two methods. If the device of varying the rates of contributions is adopted,

Consideration of
Equities in
Division

RETIREMENT OF PUBLIC EMPLOYEES

a question arises as to the justice as between individual employees of the half-and-half division of the cost between the government and the employees. For illustrative purposes let it be supposed that to provide the benefits for the entrant twenty years of age, four per cent of salary would be required annually, whereas to provide the benefits for the entrant forty years of age, eight per cent of salary would be required. On the basis of equal division of these costs, the government would contribute two per cent of salary in respect to the younger entrant, and four per cent in respect to the older entrant. More is thus paid by the government for the older entrant than for the employee who serves from youth on. If it be assumed that at age forty-five each of the two is equally valuable and each is being paid the same salary of one hundred dollars a month, the older is receiving a true compensation (salary plus the government's contribution toward the cost of prospective retirement benefits) of one hundred and four dollars, whereas the younger is receiving a true compensation of only one hundred and two dollars. This situation raises the question whether under a partially contributory system providing for a variation in contributions according to age at entrance, the government should not pay the same percentage of salary in respect to all new entrants, regardless of their age at entrance, and that the employees should be required to pay the difference between this percentage and the one representing the total cost of their retirement benefits. The percentage paid by the government might be half the cost of the retirement benefits for an employee entering at the average age of entrance. In so far as the immediate wage paid into the hand is concerned, such a provision would place a premium on early entrance into the service and a penalty on late entrance, but, in reality, the government would be treating all alike, paying for the same services the same total compensation. The difference in cost, according to age at entrance, which is a personal difference, would be borne personally by the employees.

Uniform
Govern-
mental Con-
tributions

CONTRIBUTORY SYSTEMS

INDIRECT CONTRIBUTIONS

Whether the system is wholly contributory or only partially contributory, the government is ordinarily called upon for certain indirect contributions, or to assume certain special liabilities. It will be expected to bear the costs of management, to guarantee the soundness of the system, and, if the earning power of money is of the essence of the system, to guarantee the rate of interest assumed in the actuarial calculations. Each of these three liabilities requires some consideration.

Expenses of Management. Conceivably the expenses of management could be charged against the beneficiaries under a wholly contributory system by including in the sums deducted from the employees' salaries a sufficient amount to cover the expenses of the system. In technical language the premium could be "loaded" for expenses just as insurance premiums sold by private companies are loaded. It must be remembered, however, that the cost of conducting a retirement system under the government is by no means as great as the cost of operating a private life insurance company. The government incurs no expense for agents to get the business, it collects its premiums almost automatically by deducting them from the salaries, and the number of records which it has to keep over and above those required for salary payments and for compliance with civil service rules and regulations is comparatively small. In England, some of the technical actuarial work required has at times been performed by men connected with the government offices engaged in the supervision of insurance enterprises or in other work requiring a knowledge of actuarial science, but even if special provision has to be made for such assistance, the cost of administration will generally be relatively small and would appear to be the minimum contribution by the government.

Guarantee of Solvency. When a government establishes a

RETIREMENT OF PUBLIC EMPLOYEES

retirement system, two of its principal objects are to induce men to enter its service who might not otherwise enter and to induce men to remain who might otherwise resign to accept more attractive positions. The benefits under the system, therefore, are part of the inducement, part of the consideration, or, in other words, part of the compensation. The government is, therefore, under just as great a moral obligation to see that the benefits promised are paid as it is to see that the salaries and wages promised are paid. The obligation is, if anything, greater. Failure to pay promised wages or salary becomes apparent fairly soon and the employee, though damaged, can remedy the situation promptly by seeking other employment; but failure to pay the promised retirement benefit may not occur until the employee has reached an advanced age and then the damage is great and irreparable. Sometimes the whole current of a man's life may be influenced by the fact that his employment promises him a retirement allowance if he breaks down in old age; relying on that promise, he may make no other provision. It is no consolation to him if the system breaks down, to have it pointed out that he has no legal redress, as the liability of the government was limited in the terms of the scheme and as his rights were only such as the legislation establishing the system specifically gave him.

Legal limitations on the extent of the governmental liability to pay the promised benefits are, to say the least, highly improper. The government establishes the system and is under moral obligations to know that it is sound. The individual candidate about to accept an offer of a public position cannot possibly make himself, or pay for the making of, an actuarial valuation to determine whether the liabilities of the system as established by the government are greater than the assets provided, or to determine whether any specific limitations of liability are likely to be exceeded by the time he himself reaches the retirement age. Any limitation on the liability should, however, awaken an employee's suspicions, because

CONTRIBUTORY SYSTEMS

it is presumptive evidence that the scheme is improperly organized.

The moral obligations of the government are probably equally great whether the scheme is non-contributory or wholly or partially contributory. It cannot well break its own promise to pay certain benefits, though the cost may be greater than it had expected; nor can it compel men to contribute money to purchase benefits and then send them empty away because the legislature which passed the retirement law did not have proper technical advice and adopted a miscalculation. Obviously all retirement systems operated or attempted to be operated on an actuarial reserve basis should be subject to the supervision of state departments of insurance or other competent regulative bodies.

If the legislation was adopted at the special request of the employees themselves and was their plan, the obligations of the government are perhaps somewhat affected, at least in so far as those who were in the service when the scheme was adopted are concerned. Then the mistake of fact is mutual and the employees and the government should both be prepared to make compromises to remedy the damage.

Guarantee of Interest Rate. The rate of interest is a highly important factor in any system that provides for the accumulation of a fund. In certain types of systems, a specific amount of benefit is provided in return for a specific amount of contribution, and consequently failure to invest the funds at the rate of interest on which the calculations were based, results in an actual deficit. In certain other types, run more or less on a savings bank basis, a decline in the rate of interest makes the money which the employees contribute earn less than they expected and thus discontent is engendered. To avoid deficits and dissatisfaction the government frequently guarantees that it will contribute the amount by which the interest earned by the fund falls short of the interest expected under the assumed rate. Obviously the interest rate

RETIREMENT OF PUBLIC EMPLOYEES

guaranteed should be one which it is entirely reasonable to expect can be earned consistently. Guaranteeing a markedly high rate of interest is in the nature of a disguised contribution.³ To protect itself against undue risks from changes in the rate of interest the government must provide some rapidly acting method of altering the guaranteed rate at any time in respect to new entrants.

Unless the government guarantees the rate of interest, a very low, very conservative rate will have to be assumed in the actuarial calculations on which the system is founded. More money will thus have to be collected than it is reasonably expected will be needed to yield the benefits desired. Unless a marked and unexpected fall in the rate takes place, the system will be confronted with a surplus, and some means will have to be devised for its distribution, either through cash payments, similar to the "dividends" of a life insurance company, or through increases of benefits. This arrangement would lead to considerable increase in the cost of administration and would introduce many complicated questions regarding equitable distribution. Guaranteeing a fair rate of interest with adequate provision for changing it at any time in respect to new entrants would seem the simpler procedure.

³ "We observe that the rate of interest recommended, 3 per cent per annum, is too high, if the funds formed from the teachers' contributions are to pay their own way, and this rate of interest cannot be guaranteed by the state without subsidizing the funds in an indirect and disguised form. We think that this would be an undesirable form for a state subsidy to take, and that any contributions from public funds should be direct and overt. The rate of interest obtainable upon investments in state funds is at present $2\frac{1}{2}$ per cent per annum and the teachers' contribution could not now be invested so as to obtain an appreciably higher rate. We think that this should, therefore, be the rate of interest fixed in forming the tables under which the scheme is started."—Report of Departmental Committee on the Question of the Superannuation of Teachers in Public Elementary Schools, British Parliamentary Paper, 1895, Vol. XXVI, p. 8.

CHAPTER V

THE SUPERANNUATION OR SERVICE BENEFIT

The Objects Sought in Establishing the Benefit. The Condition Upon Which Granted. Retirement in Discretion of Government. Retirement as Right at Option of Employee. Compulsory Retirement on Completion of Fixed Conditions. Optional Retirement After Fulfilling Minimum Conditions and Compulsory Retirement After Fulfilling Maximum Conditions. Age or Service, or Age and Service Conditions. Factors Involved in Deciding Upon Retirement Age. The Amount of the Superannuation Benefit. Three Divisions of Subject. The Amount of Superannuation Benefit and Amount of Salary. The Classes Described. The Discretionary Sum Independent of Salary. The Fixed Amount Independent of Salary. The Fixed Contribution Independent of Salary. Benefits Directly Dependent Upon Salary. The Salary Scale. Objections to the Use of Salary Scale. Benefits Indirectly Dependent Upon Salary. The Amount of Superannuation Benefit and the Length of Service. The Desirability of Relationship. Two Methods of Establishing Relationship. The Amount of the Superannuation Benefit and the Economic and Social Needs of the Employee. A Sum in Aid of Subsistence. Minimum of Subsistence. The Necessaries of a Standard of Life. The Absence of Sacrifice. Changing General Terms Into Concrete Figures. The Cost of the Superannuation Benefit. The Factors Determining Cost. Factors Causing Differences in Cost Between Different Employees.

THE OBJECTS SOUGHT IN ESTABLISHING THE BENEFIT

The first benefit provided in a retirement system is generally one to enable the government to retire employees who have lost their efficiency through advancing age. As has been set forth at length in Chapter I, the improvement of the staff, by providing for the elimination of the superannuated, is one of the principal objects sought by the government in establishing a retirement system; and removal of the fear of dependency in old age is one of the principal motives that lead employees to advocate a system. The allowance made to the employee retired because of advancing age is generally spoken of as a superannuation benefit, but when it is given on condi-

RETIREMENT OF PUBLIC EMPLOYEES

tion of long service, without special reference to age, it is frequently called a service benefit. The purposes of the two are essentially the same, and the difference between them is a matter of detail. They will, therefore, be considered together, and will be spoken of generally as superannuation benefits.

THE CONDITION UPON WHICH GRANTED

The Different Types Enumerated

The first general question that has to be considered in providing a superannuation benefit is, "On what conditions shall such a benefit be granted?" In respect to the conditions laid down systems may be roughly divided into four general classes, which may be described somewhat as follows:

1. Certain officers of the government are authorized in their discretion to grant allowances to employees who are superannuated, and who have satisfied whatever special conditions regarding age or service may be prescribed by the law. The employee has no legal or absolute right to a superannuation allowance upon fulfilling these conditions, or upon retiring: he is dependent for it on the exercise of a discretionary power by some superior authority.

2. The employee is given a legal and absolute right to retire on a superannuation allowance upon satisfying certain requirements as to age or service, but he is permitted to use his own discretion in deciding whether or not to retire when he has fulfilled the conditions. The legislation, in other words, although creating an absolute right to an allowance, does not compel retirement.

3. The employee is compelled by law to retire immediately upon reaching a fixed age or upon fulfilling a fixed period of service, and he is granted a superannuation allowance as of right.

4. The employee is permitted to retire with a superannuation allowance granted, as of right, upon fulfilling certain minimum age or service conditions, and he is compelled to retire with such an allowance upon fulfilling certain maximum age or service conditions.

SUPERANNUATION OR SERVICE BENEFIT

The merits and defects of each of these four types require some consideration.

Retirement in Discretion of Government. A system that permits retirement on a superannuation benefit solely in the discretion of the government as an employer is generally spoken of as a discretionary system, and sometimes as a permissive system, because it authorizes or permits the payment of a benefit but does not require it. The chief advocates of a discretionary system are those who wish to preserve for the government a maximum control over its employees. They believe that if no one is sure of a retirement benefit, all will work hard to deserve it and the government can grant it as a special recognition of merit or, in cases of great need, as a charity or benevolence; they look with great disfavor on any proposal which would ever give to the employees an absolute right to retire with a benefit. This conception of a superannuation benefit, as a sort of combination of a pension for meritorious services and a charity or philanthropy, was perhaps the dominating one in the minds of English administrators and legislators until roughly the latter quarter of the nineteenth century and consequently the English experience affords some excellent opportunities to study the discretionary system in operation, notably in the cases of the constabulary, the City of London, and the Metropolitan District police, the medical officers under the Irish poor law, and the teachers in the schools aided by government grants. In each case a retirement system, originally discretionary, became involved in difficulties, and one of the features which was carefully reviewed and found wanting was this element of discretion. Its actual operation is very different from its theoretical operation and it has striking and probably insuperable defects.¹

The Theory
of the Dis-
cretionary
Pension

¹ The following reports in the *British Parliamentary Papers* are of interest in this connection:

Report of the Select Committee on Police Superannuation Funds,

RETIREMENT OF PUBLIC EMPLOYEES

Injurious
to the Gov-
ernment

The interests of the government which the discretionary system is, in theory, designed to protect, are not, in fact, safeguarded. Under it retirements may be made, not for the good of the service, but absolutely against its interests. A common practice among the English police, in so far as one can judge from the evidence, was to seek retirement as soon as they thought they had a good chance of getting it, or, in other words, to give way to the not unnatural desire to make an uncertainty certain at the earliest possible moment. This desired result was apparently accomplished at times by bringing influence to bear on those whose duty it was to exercise discretion. As soon as the employee who wanted to retire thought his wires were in order, he applied for his pension; and with it once safely voted to him for life during good behavior, he sought, if he had not already found, some other occupation by which he could supplement his allowance. On the other hand, the superannuated man who did not want to retire would exert his influence to remain on the active roll on full pay. The object of the weak employee, it was charged, became not so much to perform his duties as he believed they should be performed, as to perform them in a way which he believed would be pleasing to the persons in whose hands lay the power to grant him a pension. The question was raised whether, in some cases, officers did not hesitate to enforce, for example, the liquor laws if they happened to know that one or two members of the watch committee of the council who would vote on the question of their retirement were involved in the violations. Similarly, medical officers under the Irish poor law complained that they were illegally called upon to attend without charge persons who were able to pay for

1875, Vol. XIII. Report of the Select Committee on the City of London Police (Pension Bill), 1889, Vol. 9; Report of the Departmental Committee on Metropolitan Police Superannuation, 1890, Vol. LIX; Report of the Committee on the Union Officers Superannuation; Ireland Bill, 1882, Vol. XIII; Report of Committee whether by deductions from the Parliamentary Grant in aid of Elementary Schools, etc., 1872, Vol. IX; Report of the Select Committee on the Asylum Officers Superannuation Bill, 1909.

SUPERANNUATION OR SERVICE BENEFIT

their services and who had secured tickets entitling them to free treatment in gross violation of the law, but the medical officers were more or less estopped from reporting to the local government board, because the guardians who were in the habit of issuing the tickets as sort of trading stamps to persons who patronized them were the men who would determine whether the medical officers should have pensions.²

Such cases of disregard of the public interest are probably more or less inevitable under a discretionary system in the public service, but it has another objectionable feature from the standpoint of the government. It is financially uncertain. To what extent such a discretionary power will be exercised is a difficult thing to predict; and the most elaborate and painstaking actuarial computations may go for naught, if a change of party brings into office a group of men who utilize their legal discretion in making vacancies for the "deserving" by retiring the existing officers on pensions. A discretionary system, therefore, must almost inevitably be operated on the cash disbursement or assessment plan, whereas, perhaps, more than any other it needs that strict accounting control that comes from the actuarial reserve basis.

Financial
Uncertainty

From the point of view of the employees, a discretionary superannuation benefit is vicious. It leads to discrimination between employees: the man who has powerful influence with the arbiters receives a pension when he wants it, whereas the man who is without influence or who has incurred the displeasure of the arbiters may receive no consideration whatever. Under a wholly or partially contributory system, the employees may see their funds dissipated by a political un-

Against
Interests of
Employees

² See report of the Committee on the Union Officers Superannuation (Ireland Bill), British Parliamentary Papers, 1882, Vol. XIII, p. 57. For a case in which a doctor in charge of a hospital for the insane had offended a member of the committee which would pass on his superannuation, by rejecting as unfit for food meat furnished by a contractor, partner of the committeeman, see report of the Select Committee on the Asylum Officers Superannuation Bill, British Parliamentary Papers, 1909, p. 23, question 306.

loading upon the retirement list. Instead of adding a new certainty to their lives, it adds a new element of uncertainty. The man who has been careful and painstaking throughout the long years of his service may be dismissed without pension in his old age because of some errors due to his enfeebled condition. On the other hand, the man who has served faithfully for years may have produced against him the record of some early offense, long since atoned for.³ The ingenuity of the representative of the taxpayer who is trying to find some reason why a pension should not be granted an employee who is forced to retire because of old age is great, especially if the cost of the retirement is directly chargeable against the tax levy.⁴ One employee may be refused a pension because he has saved something and needs no assistance, whereas another will be refused on the ground that, although he has saved nothing, he ought to have saved. The administrators not infrequently seem to regard the awards as a form of outdoor poor relief, and they generally absolutely refuse to consider the point of view of the employees that the benefits under a retirement system are part of the compensation and that an employee is as much entitled to them as he is to his salary or wages.⁵

Retirement as Right at Option of Employee. Retirement at the option of the employee, after he has fulfilled certain min-

³ Report from the Select Committee on Police Superannuation Funds; British Parliamentary Papers, 1875, Vol. XIII, p. 53, q. 125, and p. 120, q. 301.

⁴ For a list of reasons advanced for refusing pensions under the Union officers discretionary system, see "Report of Committee on the Union Officers Superannuation (Ireland) Bill," British Parliamentary Papers, 1882, Vol. XIII, p. 92.

⁵ The London City Police, according to the Commissioner, Sir James Fraser, preferred a lower benefit by right than the higher benefit which was discretionary. Possibly they were affected by the insolvency of the fund and the necessity for going to the rates for money. Benefits were frequently held up and a man kept on the active force when he should have been retired.—Report from the Select Committee on the City of London Police (pension) Bill, British Parliamentary Papers, Sessional Papers, 1889, Vol. 9, p. 12, q. 199.

SUPERANNUATION OR SERVICE BENEFIT

imum conditions regarding age, length of service, or both, is, of course, perfectly fair to the employee, provided the detailed conditions are reasonable. It recognizes all his rights and practically lets him consult his own convenience about retiring.

The rights and interests of the government under such a system are not sufficiently protected. In case an employee is incapacitated by old age, but is anxious to continue on the active rolls, as is not infrequently the case, the burden of the initiative is placed on the administrator, who must either attempt to persuade the old employee to retire or take active steps toward his dismissal. The fact that the old man would have something to live on would undoubtedly make administrators more ready to act than they are when no retirement allowance at all is available, but in certain special and important cases, the old forces would still come into play. Influence, both political and social, would operate to keep on the active payroll men who should long since have been retired for the good of the service; and the administrator upon whom rested the responsibility for suggesting his own retirement would rarely grow old; each year would but add new riches to the value of his long experience.⁶

Failure to
Protect
Govern-
ment

Compulsory Retirement on Completion of Fixed Conditions. Compulsory retirement at a fixed age, or after a fixed period of service, is the remedy frequently suggested to meet the difficulty. It involves selecting an arbitrary age at which all men are assumed to be incapacitated, or an arbitrary length

Fixed Age
Inelastic

⁶ The English system for civil servants originally permitted retirement at the option of the employee, provided minimum age and service conditions had been fulfilled. Both the commissioners on the Operative of the Superannuation Act (Parliamentary Papers, 1857, Vol. XXIV, p. XVI) and the Royal Commission on Civil Establishments (Idem, 1888, Vol. XXVII, p. XXII) reported against the device and recommended a compulsory age of retirement. By order in council dated November 29, 1898, all persons in the established service are liable to compulsory retirement at the age of 65. The power of re-tention in special circumstances for a period not exceeding five years is, however, lodged with the Treasury.

of service after which they are assumed to be worn out. The assumption, unfortunately, is contrary to the common experience of mankind. Everyone knows of striking instances in which men have reached the three score years and ten in full possession of all their mental faculties and with a mind that is a veritable treasure house of wisdom; and on the other hand they know of cases in which men grow old prematurely and in which the mind ceases to develop or even goes back before the man's contemporaries have begun to approach their zenith. A fixed age that would lead to the retirement of the prematurely old at the proper time would rob the public service of many of its invaluable older men, whereas a fixed age designed to retain the exceptional men would retain many who are not exceptional.⁷

The English
Device of
Special
Extensions

In the English civil service what may be termed an experiment is being tried with a provision that fixes the compulsory age of retirement at 65 but permits the treasury to authorize

⁷ "The arbitrary retirement of teachers at a given time determined by age, or by age and service together, is wasteful. At best this time can be properly adapted only to the so-called average or typical teacher: Some teachers of impaired efficiency should be required to retire earlier on smaller pensions and others who retain their efficiency should be permitted and even expected to continue in service. The retention of the first-class teacher till an arbitrarily fixed time is obviously poor economy. The arbitrary retirement of teachers still fairly efficient is no less wasteful, for in such cases the public is required to bear two burdens, salary and pension, when one would serve the purpose just as well. The ideal plan is one in which the time of retirement on pensions, subject to the fulfillment of reasonably low minimum conditions of age and service, depends upon the decision of a State Board of Retirement or other central agency with power to compel retirement or to require continuation of service as the public interest demands."—R. W. Sies, *Teachers' Pension System in Great Britain*, p. 81.

"The late William T. Harris always insisted that a college professor was at his best between the ages of 65 and 75, and he urged the trustees of the Carnegie Foundation at the inception of the trust not to make the minimum retiring age lower than 70. Mr. Harris's argument was a partial one, but it had truth in it. There are many teachers who are at their ripest and at their best between 65 and 75, and such men of course ought to remain in their profession."—"The Moral Influence of a University Pension System," by Henry S. Pritchett, *Popular Science Monthly*, New York (1911), p. 511.

the retention of employees in special cases for an additional period not to exceed five years.⁸ The names of the employees thus retained have to be reported to Parliament. In connection with this experiment, it is interesting to note that Sir Francis Mowatt of the treasury, who had had long experience in connection with the administration of the English system, advised against such a power of extension because, as he expressed it to an investigating commission, "you would buy the retention of the services of one or two efficient men for a few years at the expense of being saddled with the services of a large number of men who are no longer efficient."⁹ Provisions making certain reductions in the benefits if men are retained after 65 have, however, been introduced which tend to prevent abuse of the privilege. Unless properly safeguarded, the device would probably lead in this country to the retention of employees who had influence or who were in the more important positions.¹⁰

⁸ The English system permits retirement at 60 and makes it compulsory at 65 except as above indicated.

⁹ Second Report, Royal Commission on Civil Establishments, British Parliamentary Papers, 1888, Vol. XXVII, p. 159, q. 44,717.

¹⁰ The following testimony of Lord Claud Hamilton, chairman of the Great Eastern Railroad, given before the Royal Commission on Superannuation in the Civil Service (British Parliamentary Papers, 1903, Vol. XXXIII, p. 57, q. 1691) is perhaps suggestive, though funds in private establishments can operate without compulsory retirement ages much more successfully than can government systems, because the private administrator has greater incentive to force retirements than has a public administrator and is generally less subjected to improper influences.

"What we do—and I do not think any other company does it—we have got what is called an 'Old Age Committee, which meets once every two months, and every servant of the company who is over the age of 66 has to appear before the directors accompanied by the head of his department. The directors then see them, talk over their condition of health and their abilities with the head of the department and either say they remain in for another year and come up again, or for two years and come up again, as the case may be, and in that way we see the whole of our old servants about once a year—all the men over 66—and, I am happy to say, so healthy is the railway service . . . that we have a considerable number of men between 75 and 80 still in our wages list, whose health is sufficiently good to enable them to perform their respective duties."

RETIREMENT OF PUBLIC EMPLOYEES

Optional Retirement After Fulfilling Minimum Conditions and Compulsory Retirement After Fulfilling Maximum Conditions. Optional retirement on fulfilling certain minimum conditions and compulsory retirement on fulfilling others seem to constitute the best compromise device, with possibly a provision for limited retention above the compulsory age, if that can be properly safeguarded. Such conditions, on the one hand, recognize that men fail at different ages and, on the other, protect the government against the danger of prolonged retention in office of incapacitated men. Such conditions may result in a certain type of hardship in exceptional cases if men retain their full usefulness to advanced age, but such cases are probably relatively infrequent, and the hardship can last but a few years. Generally, moreover, such men can soften it by devoting their last years to some private activities in which they have long been interested. The opportunity that it promises for leisure to devote to one's hobbies is perhaps the most attractive feature of a superannuation benefit.

Age or Service, or Age and Service Conditions. After a decision has been reached regarding the general type of condition to be prescribed for a superannuation benefit, the next question is whether these conditions shall be based on age only, on service only, or on the two combined.

Age
Conditions
Preferable

If all new employees enter the service at about the same age, the distinction between a service condition and an age condition is perhaps of relatively little importance and an age condition is preferable, as it simplifies actuarial computations; but, if the ages of new employees vary very much, even five years, a service condition is objectionable. If a long period of service is required, the employee who enters late in life will be a very old man before he is eligible to retire; and, if he becomes inefficient before fulfilling the service conditions, he will probably be continued on the active roll. If, on the other hand, a short period of service only is required, with the idea of permitting the late entrant to retire at a reasonable age, the

SUPERANNUATION OR SERVICE BENEFIT

young entrant will be permitted to retire at the very prime of life. For example, if thirty-five years of service is required, the man who enters at forty cannot be retired until he is seventy-five. If the service requirement is reduced to twenty-five years to permit him to retire at sixty-five, the man who enters at twenty can retire at forty-five. Elaborate provisions can be introduced requiring longer service from young entrants than from older ones, but, on analysis, these will be found to rest in reality upon an age basis. Everything would be much simplified if the requirement was to rest on age directly instead of indirectly.¹¹

The employees in some branches of the government advance the contention that the work is so wearing that an employee's usefulness is destroyed after a certain number of years' service regardless of his age. A patient reading of voluminous masses of pension evidence leads one to the conclusion that it is a recognizable human weakness for a man to regard his own calling as one involving peculiar hardship or danger or as being exceptionally wearing. Individual instances of death, accident, disease or nervous breakdown will

Unwar-
ranted
Demand
for Retirement After
Short
Service

¹¹ "It would appear that in a department with a wide range between the minimum and maximum age limitations for entrance into the service the requirement of a stated uniform number of years of service before retirement is impracticable as a means of humanely eliminating teachers who have passed the period of usefulness."—Report on Teachers' Retirement Fund; The Mayor's Commission on Pensions, New York, 1915, p. 16.

"Provision has been made for full pension after only twenty years' service for instance, though the employee might then be but 40 years of age and fully able to perform his duties for many years to come. This abuse is chiefly found in plans for pensions for members of a very small class only—such as firemen for instance. It is often defended on the ground that the work is arduous and perilous; but, the former calls for shorter hours of time and the latter for adequate provision for compensation for injuries and death. Neither can justify or excuse a pension plan which retires a man when his value is greatest and involves an addition to the compensation for his services which would be intolerable if applied to all civil servants."—"Governmental Methods of Providing Old Age Pensions," by Miles M. Dawson; International Congress of Actuaries VII, Amsterdam, 1912, p. 209.

be cited as conclusive proof of the assertion. Statistical data, suitable for determining the relative probability of death, accident or disease, are strikingly absent; or, if introduced, are presented by some hard-hearted actuary or statistician who thinks figures covering the whole field are more significant than individual cases full of human appeal. It is the same old phenomenon of the exaggerated importance of the isolated instance. Before a government commits itself to a policy permitting retirement after a term of service so short that it will allow some employees to become pensioners in middle life, it should have supporting evidence in conclusive statistics, collected and compiled by an impartial, scientific statistician or actuary. No matter how long a man may have been in the service, his personal observations are of little value quantitatively. He cannot realize how many are exposed to risk and how long they are exposed, and, consequently, he cannot tell how frequently cases like those of which he speaks occur in relation to the whole group of employees nor has he had experience in other lines of activity. A large body of adequate quantitative material bearing on occupational mortality, accident, and disease is gradually being accumulated, and to such actual data and to men experienced in their use legislators should turn for real information regarding the effects of an occupation on health rather than to the testimony of inexperienced, interested witnesses. Legislative bodies owe a particular duty to the public not to establish a system which will permit able-bodied employees to stop work in middle life to live at the expense of society or to become subsidized competitors for those few private occupations which are open to persons of their age.

General observation, and that quality which is termed "common sense" would suggest that an age basis for conditions is much the wiser. It operates in harmony with natural laws. In consequence, all the computations necessary to enable the government to determine what its retirement system is actually costing are vastly simplified because methods for measuring the

SUPERANNUATION OR SERVICE BENEFIT

operation of natural laws are well worked out and are relatively simple.

A minimum service requirement can, of course, be included in a system that is otherwise based on age. Such a provision somewhat increases the cost of the actuarial expenses of management or reduces the accuracy of the computations. With a compulsory age of retirement, it results indirectly in the establishment of a maximum age at entrance; and the simpler course would be to establish that maximum directly. Under a system without a compulsory age, or under a system with a minimum permissive age and a maximum compulsory age, it may result in the retention of a man who is already superannuated to enable him to qualify for a benefit. The advisability of including such a limitation is to be determined somewhat by the amount of the benefit and the method of determining it, but it can be laid down as a general principle that no condition should be established based on service if the same general purpose can in any way be accomplished through conditions based on age.

Minimum
Service Re-
quirement

Factors Involved in Deciding Upon Retirement Age. The exact age conditions to be prescribed will depend primarily on the requirements of the work and the costs of the system, though the interests of the employees and of the general public must, of course, be considered.

In respect to their requirements, government functions may be broadly divided into two classes, those which demand physical activity and bodily strength, and those which need mainly mental activity. Mental activity, it is generally recognized, continues much later in life than physical activity, and frequently in retirement systems a younger retirement age is prescribed for what may be termed the athletic services, such as the fire department and the police department, than for the more sedentary services, such as that of the clerks in public offices; but these differences have been based on general observation and on more or less relevant testimony advanced

Nature
of Work

RETIREMENT OF PUBLIC EMPLOYEES

by each group of employees in seeking their own retirement rather than on any thorough study of facts. Large government units could with profit make special studies of their own forces with two objects in view: first, to determine to what extent formal arrangements can be made for transferring persons who are superannuated for branches of the service requiring great physical activity to positions in other branches for which they are not superannuated; and, second, to get accurate data regarding the ages at which superannuation actually does occur with facts regarding its causes.

Possibility of
Transfer

To what extent it would be possible to utilize in other branches of the government, the services, for example, of policemen or firemen who have passed the physical prime of life, it is impossible to say offhand; it is a subject requiring investigation. To the administrator accustomed to taking new employees from a civil-service register of eligibles established through tests designed to meet more or less closely the special requirements of the work which he has to do, the scheme suggests a loss in efficiency. He fears, for example, that a retired policeman may not do a type of work within his qualifications quite so well as a younger man specially selected for the particular task. The real question, however, is rather one of general social efficiency. Possibly the younger man can do the work more efficiently, but the difference may not be large enough to compensate society for the cost of having the younger man do it, while the older man, perhaps only a little less able, is supported in idleness on a superannuation benefit. In several countries of continental Europe, a similar problem on a large scale has been encountered in connection with the non-commissioned officers of the army. They must be kept in the army for a number of years to assist in training the successive classes of privates, but as the work requires great activity and as it is desired to train many such officers, they have to be retired early. One solution has been to make a careful survey of governmental activities and to reserve absolutely for these men such positions as they are obviously fitted

SUPERANNUATION OR SERVICE BENEFIT

to fill; and to give them preference for certain other positions if they can pass prescribed examinations. A position is not guaranteed each man, and the opportunities are awarded on the basis of merit. The non-commissioned officers strive to attain them and presumably study to fit themselves for the work. English observers reporting on the operation of the various systems commend them.¹² The point is made that the men who have thus been trained and disciplined are in great demand, not only for public positions, but for private employment, as they have profited from their experience physically, mentally and morally. Though such a system might not be effective in this country in dealing with parts of the service that require physical activity, it is at least worthy of consideration. It would probably necessitate some reduction in the average age of retirement from the earlier service, so that the man could enter upon his new duties at an age when he could more quickly acquire proficiency in them. Such a provision might, moreover, be to the distinct advantage of the earlier service, as it would eliminate any twilight zone between the prime of physical activity and a reasonable age for superannuation retirement.¹³ The present difficulty is that each branch

¹² Reports from Her Majesty's Embassies in Austria-Hungary, France, Germany and Italy as to the Civil Employment of Soldiers and Sailors on completion of Service.—In British Parliamentary Papers, 1893-94, Vol. LXXXIX, p. 1147.

¹³ "3103. With regard to the light work which you spoke of just now as being the work upon which you employ your men over 50 years of age, is not that work looking after stations, and so on, work which must be done?—It is necessary, no doubt, but it is also extremely inconvenient at those times of pressure which occur in every community, that those men cannot be told off for special work. 3104. Is not a man who is ordinarily employed on light work, capable of doing some special work upon some extra occasions?—He might be; I could put my finger on some who are capable and some who are not. 3105. But taking the average of the men in your force, if they have good health and do not meet with any accident, surely from 50 to 60 they would be able to go on ordinary work?—They may or may not. I would very much prefer having stronger men."—Mr. W. K. Wait, M.P., Chairman Watch Committee of Bristol, testifying before the Select Committee on Police Superannuation Funds, British Parliamentary Papers, 1875, Vol. XIII, p. 125.

RETIREMENT OF PUBLIC EMPLOYEES

of the public service regards itself as an independent unit and strives for its own independent retirement system. To bring about correlation is a long, slow process. The latest English parliamentary bills dealing with superannuation, introduced after over a century of experience, have been directed toward so correlating the retirement schemes that a man may pass from one branch of the imperial service to another without sacrificing retirement privileges. In this country the improvements that can be made in government service through the general principle of correlation are, of course, enormous.

Improve-
ment of
Working
Conditions

Real data on the subject of the age at which superannuation occurs would not only be of value in determining a proper age for a retirement system, but properly analyzed, with special reference to cause, it might prove of marked social value in suggesting means whereby superannuation could be retarded through changes in working conditions. So-called welfare work is becoming a feature of many large corporations, and scientific studies of the employees of the government made by the public health authorities would be of general public value. Such studies would, of course, bring out the differences in superannuation ages in different types of service, which is the first factor that has to be considered in fixing the age conditions for a superannuation benefit.¹⁴

The Cost
of the
Benefit

The second factor that has to be considered in fixing the retirement age is the cost of the superannuation benefit. The lower the retirement age the greater is the cost; and even very slight reductions in age make startling increases in cost. A diagram showing the age distribution of the employees of an ordinary service of any size generally takes the form of a pyramid with a few old employees at the apex and a great

¹⁴ Operating retirement systems on the actuarial reserve basis necessitates the collection and tabulation of data regarding the ages at which men retire as superannuated. Such data, supplemented by medical examinations and reports, could be made of great value in studying methods of delaying the outset of superannuation. They would also permit of the gradual adjustment of the retirement condition to the exact needs of the service.

SUPERANNUATION OR SERVICE BENEFIT

body of young new entrants at the base. As one passes from the apex of this pyramid toward its base, the age diminishes and the number of employees in each successive younger age grows larger. Each year therefore that is taken off the retirement age adds a larger increment to the number to be retired than has been added by any previous reduction of a single year. Not only does it add to the number to be retired immediately and annually thereafter, but it adds a year to the period during which retirement allowances will have to be paid to the group of employees who would have been retired at the later age. Under a wholly or partly contributory system it not only increases the number of years retired employees will draw benefits out of the fund, but it reduces the number of years during which they will make payments into it and during which the whole accumulation will draw interest. The annual interest earned of course grows markedly greater in each successive year the fund is permitted to accumulate undisturbed. A reduction in age of retirement therefore reduces assets and increases liabilities. Whether the system be contributory or non-contributory, the matter of a year more or less is never something to be lightly regarded; a difference of a very few years may almost double the cost of the system.

The views of the employees are a much more reliable guide in the selection of a superannuation retirement age if the system planned is wholly or partially contributory than if it is non-contributory. If none of the burdens are to fall directly and obviously on the employees, their attitude, though seldom so ingenuously expressed, is likely to be that of the English postman who told an investigating committee, "We think that a man has to work too long to get a pension; we do not think he gets a sufficient pension when he does get it, and we think there is a very large number of men who do not get pensions who ought to get pensions." When the employees face the questions of costs as a matter of individual expenditure, they may be excellent judges of the extent to which the prospect of early retirement is worth what it costs in present sacrifices.

Value of
the Opinion
of Em-
ployees

RETIREMENT OF PUBLIC EMPLOYEES

The
Interests
of the
Public

The interest of the public as a whole is probably that every man shall be productively employed so long as he is able to work. Any provision that enables a man to retire to idleness at an early age while still fully efficient is, accordingly, contrary to public interest. It can be justified only if the retirement of the particular employee permits the organization he leaves to increase its public service, to an extent which will more than offset the cost of retiring the employee. Legislation which will permit a special class to live in idleness at an age when most men are still working is presumptively contrary to public policy, and demands absolutely conclusive evidence for its justification.¹⁵

THE AMOUNT OF THE SUPERANNUATION BENEFIT

Three Divisions of Subject. The amount of the superannuation benefit to be provided is the next important question after the general conditions upon which such a benefit is to

¹⁵ "The teachers who have retired on the ground of age have averaged between sixty-nine and seventy years of age, a result that was anticipated, since sixty-five was expected to be only a minimum age limit. So far as the life of this foundation has gone, its experience shows that a teacher does wisely to continue his work as long as good health and strength remain. In the first sensation of connection with a pension system, the idea of retirement at sixty-five has evidently presented itself as very attractive to a number of men, but the experience of the six years makes it clear that on the whole this age is probably too low a limit. This inference is borne out by the large number of applications from retired teachers who, after a year or two of absence from regular work, are ready and anxious to get back once more into the work of the teacher. The experience of six years enables the officers and trustees of the foundation to realize, as they could not realize before, that the value of the pension to the man who approaches sixty-five lies not in the opportunity to escape from active work at that age, but in the protection afforded whenever the period of usefulness and strength has passed by. That teachers are realizing this more and more is also apparent—in the main and so far as general results go, this rule has worked well. It has worked no demoralization, and while some men today would be better off in their old places in the classroom than on the retired list, on the whole the rule has abundantly justified itself."—Seventh Report of the Carnegie Foundation for the Advancement of Teaching, New York, 1912, p. 82.

SUPERANNUATION OR SERVICE BENEFIT

be granted have been decided upon. It is, perhaps, one of the most difficult and complex problems that those responsible for the establishment of a retirement system have to solve; and in an attempt to simplify it, it will here be considered under three separate heads, but, of course, these three divisions are more or less arbitrary and to a certain extent overlap one another. They are: (1) the relationship between the amount of benefit and the amount of wages or salary; (2) the relationship between the amount of benefit and the length of service, and (3) the relationship between the amount of benefit and the social and economic needs of the employee.

THE AMOUNT OF THE SUPERANNUATION BENEFIT AND THE AMOUNT OF SALARY

The Classes Described. In relation to salary, the amount of the superannuation benefit may be (1) entirely independent of salary; (2) directly dependent on salary, or (3) indirectly dependent on salary.

Three systems giving superannuation benefits entirely independent of salary may be clearly distinguished: (1) the discretionary system which leaves the amount to be paid to the decision of the administrators; (2) the so-called "flat pension system" which provides a uniform amount for each employee and (3) the flat contribution scheme which provides that a fixed sum shall be paid annually by each employee or on his account and the benefit shall be the amount which these annual payments will purchase.

Independent
of Salary

Systems providing a direct relationship between the amount of benefit and the amount of salary may be divided into two broad classes: (1) those which base the benefit on the salary earned throughout service, generally spoken of as "average salary plans" or sometimes as "total salary plans," and (2) those which base the benefit on the salary earned by the employee in the latter years of his service, generally spoken of as "terminal salary plans." Three variations of the terminal salary plan are encountered. Un-

Directly
Dependent
on Salary

RETIREMENT OF PUBLIC EMPLOYEES

der the first, the benefit is based on the salary the man is earning on his retirement; under the second, on the salary that he was earning in a certain year, a fixed number of years before his retirement, and under the third, on the average salary that he earned for a given number of years immediately preceding his retirement.

Indirectly
Dependent
on Salary

The general principle of the plans providing for an indirect relationship between the amount of salary and the amount of benefit is that contributions, bearing some fixed relationship to salary, shall be made by or in behalf of each employee each year and that the amount of benefit shall be what these annual contributions will purchase. Schemes of this nature are susceptible of a good many variations, and in describing some of the more important ones the employee will be spoken of as paying the contributions, but it must always be remembered that the scheme is equally applicable regardless of who makes the payments.

Perhaps the simplest form is the one in which each employee pays annually a fixed percentage of his salary. Substantially the same results are attained if the employees are divided into classes according to salary and each employee in a given salary class pays a certain fixed amount, the exact amount being higher for each higher salary class than for the one below it. A more elaborate development provides that the percentage which the employee is to pay throughout his service shall be determined by his age at entrance. A still more elaborate development provides that the percentage fixed at the time of the employee's entrance shall apply only to the amount of salary that he received at entrance and that in respect to each increase of salary a new percentage shall be applied, determined by his age at promotion.

The proponents of retirement legislation thus have a wide choice, but, of course, the various schemes are by no means of equal worth. Their merits and defects can perhaps be most easily considered in the order in which they have been thus briefly described.

SUPERANNUATION OR SERVICE BENEFIT

The Discretionary Sum Independent of Salary. The discretionary sum independent of salary is open to essentially the same objections that were discussed under discretionary retirement conditions (page 105). Power to fix the amount of the retirement allowance is desired mainly by persons in superior positions or by governing boards to permit of greater control over the destinies of employees. The inclusion of such powers arises from the conception of a retirement system as a charity or philanthropy or as a system of special awards for meritorious conduct. Not infrequently such a system results in consideration of an employee's needs or of his personal virtues and his morality. Acts of misconduct, which were punished, presumably adequately, at the time they were committed will be reviewed and possibly the offenses of the last few months will be taken into consideration without any regard to the long record of past services. Such a system is, of course, susceptible to a vicious application of the spoils system and leads the employees to retire at the moment they believe the arbiters are likely to make them a generous award or to hang on in the active service after superannuated from fear that the time is not propitious. Instead of settling definitely that old age will be provided for in a certain fixed way, the employees have a new, artificial uncertainty added to the natural uncertainties of life. The whole trend of modern thought is, of course, against such legislation, and it is doubtful if at the present time a general discretionary provision would be considered, but one to establish maximum and minimum limitations within which the benefits must lie might be advocated to enable a distinction to be made between the highly meritorious employee, the average employee, and the inferior employee.

Objections
to Dis-
cretionary
Pensions

In connection with the establishment of a maximum and minimum provision, the testimony of Sir C. E. Trevelyan of the English treasury given before the Select Committee on Civil Service Superannuation of 1856 is of interest. He said:

Maximum
and Min-
imum Lim-
itations

RETIREMENT OF PUBLIC EMPLOYEES

"For many years I was an advocate for the treasury's retaining the power of making what I may call a minute adjustment [between the merits of the employee and the amount of the benefit]. I am not now speaking of entirely withholding pensions, or of giving good service pensions, but of adjusting the rate of pensions within the limit of the maximum rates authorized to be granted by law at the end of the service. For many years that seemed to me a very salutary provision, but I found that it was very generally objected to; in fact, I never found anybody not at the treasury who approved of it. For many years I argued for it and supported it strongly, but at last I found it was impossible to conquer the general dislike with which that provision was regarded and in course of time came to the conclusion that as this power is exercised by the treasury, within the walls of the treasury, upon data known only to the treasury and the grounds upon which these fine distinctions are made could not be generally known, it was impossible to obtain the general confidence of the service in the exercise of this power. I found that the officers in the same department were constantly comparing the different cases and saying so and so was at least as good as such another, why was a distinction made."¹⁶

Difficulty
of Admin-
istration

In any large service a maximum and minimum provision would seem to be open to this insuperable objection. If the amount is to be varied in accordance with the merits of the employee, some central agency for determining the amount is necessary if any uniformity of consideration is to be secured throughout the service, and no central agency can easily be possessed of or be put in possession of all the facts, and, consequently, arbitrary rules have to be adopted giving certain fixed weight to certain selected indices. These rules and regu-

¹⁶ British Parliamentary Papers 1856, Vol. IX, p. 75, q. 605.

lations can be worked out beautifully for the average or ordinary employee, but there is inevitably the exceptional case; and a few exceptional cases, one way or the other, are sufficient to cause that general distrust and dissatisfaction that C. E. Trevelyan encountered in trying to administer the discretionary provisions of the English system. To one who is familiar with the extent to which in this country political influence is exerted to affect administrative action, the objection that can be advanced on that score alone seems sufficient to kill any discretionary feature. It should, however, be added in conclusion that any discretionary power to vary the amount of benefit decreases the actuarial soundness of the system.

The Fixed Amount Independent of Salary. The "flat pension," or, in other words, the fixed amount independent of salary, is almost invariably a small sum. It may be only a grant in aid of support or a sum little above the minimum of subsistence. It cannot exceed the salary of the lowest paid employee, without producing an intolerable situation, the payment of more to retired old men who have few dependent on them than is paid to the younger active employees, who on the average have more and younger dependents. Unless all salaries or wages are about equal, it involves an inequality in sacrifice upon retiring, as between different grades of employees. The more highly paid, more successful men, would complain because relatively more is done for the unsuccessful employee than for the successful. Unless a compulsory age of retirement was established, all the more highly paid men would remain in the service as long as they could hang on, and their fellow employees in responsible positions would hesitate to take action for their retirement. With a compulsory age of retirement, the small fixed sum might promote saving and thrift on the part of the more highly paid, more ambitious men, but it would also tend to drive young, ambitious men away from the service to seek positions under other employers

Of Limited
Applicability

RETIREMENT OF PUBLIC EMPLOYEES

where no compulsory retirement age was prescribed or where more generous benefits were allowed on retirement. As a provision for a permanent retirement system, the fixed amount for a superannuation benefit therefore has little to commend it unless practically all employees receive about the same wage or salary at retirement age.

Of Limited
Applicabil-
ity

The Fixed Contribution Independent of Salary. A provision for the contribution of a fixed sum annually by each employee to purchase for him such a benefit as it will, is possibly a feasible plan in a service in which all enter young and attain to about the same salary grade by the time they reach the retirement age. If any considerable number of employees enter late in life, the scheme is impracticable. A contribution which will provide a sufficient superannuation benefit for the young entrant, who makes payments for many years and derives much help from the factor of interest, will be entirely insufficient to give an adequate allowance to the older entrant who makes payments for only a few years and derives scant help from the factor of interest. If the contribution be raised to a point at which it will provide for the care of the older entrants, it becomes burdensome on the younger entrants as they are forced to accumulate a sum which will provide an allowance far in excess of their needs, possibly even a sum in excess of their active salary. If the ultimate salaries vary materially, the scheme involves great inequalities in the rate of sacrifice, even if the men all enter at about the same age. The scheme is, therefore, open to some of the objections that apply to the benefit of a uniform sum for all.

A Natural
Develop-
ment

Benefits Directly Dependent on Salary. The superannuation benefit directly dependent on salary was, perhaps, the most natural one to be selected in the establishment of a non-contributory system operated on the assessment or cash disbursement basis; that is, under a primitive system that paid pensions as they came due out of current revenues. It in-

volved a fairly nearly equal proportionate sacrifice on retirement for all employees, especially if based on terminal salary. Not unnaturally, too, as the retirement movement developed, this feature was adopted for partially contributory systems and for systems which were established to operate on an actuarial reserve basis or on what was believed to be an actuarial reserve basis. It is, however, now regarded by some authorities as being open to very serious defects, because, if the system is on the actuarial reserve basis, or if it requires the employees to bear a certain proportion of the cost actuarially determined, it requires the actuary to predict, on the basis of the present or the immediate past, what the salaries of the employees are to be in the future. As the actuary would express it, if the superannuation benefit is a function of salary, a salary scale has to be used.

The Salary Scale. The general nature of the simpler type of salary scale, which is sometimes used by actuaries in dealing with very large forces, is really not at all a difficult thing for the non-actuarial mind to grasp, especially if broadly described without any attempt at actuarial niceties. Roughly speaking, the actuary collects data regarding the age and salary of each present employee, or of each employee of the past few years, and he finds through the use of average salaries by ages what the rate of percentage increase in salary has been for the average employee, as he passed from age to age. When this branch of the computation is completed, he has a series of ratios which represent the yearly percentage increase in the salary which has taken place for employees at each age. He then assumes that the rates of change thus indicated will probably represent the change that will take place in the future as the employee passes from the earlier age to the later. To facilitate the use of these ratios of percentage of increase, the actuary sometimes assumes a rate of salary for the youngest age represented among the employees, and by increasing this amount by use of the rate of increase he produces a table or scale of salaries

RETIREMENT OF PUBLIC EMPLOYEES

for all ages. Refinements are of course introduced. The rates of increase are graduated to eliminate idiosyncracies that may arise from the use of small numbers, and the actuary not infrequently makes discretionary adjustments to allow for changes that can be anticipated or for known defects in the basic data. Sometimes the employees have to be divided into classes and a separate set of rates produced for each separate class, to make allowance for the great differences in rates of advancement in different occupations. The description given above indicates, however, in a very general way, the nature of the salary scale.

In dealing with some forces, this simpler method is inapplicable, because the conditions of the service may be such as to demand the construction of salary scales which take into account not only the employee's age, but his length of service or in certain important divisions of the service classes of employees may progress and others not. The actuary, therefore in some cases has to resort to a more complicated method. The essential points are (1) that under any method the salary scale is based on averages and cannot be used to show the actual increase in the salary of any individual employee, since some employees progress more rapidly than the average and others less, and (2) that it assumes that the general rates of progress can be estimated from the situation existing in the present, or that did exist in the immediate past.

Objections to the Use of the Salary Scale. In opposition to the establishment of a scheme requiring the use of salary scale, four principal objections may be advanced, which can be summarized as follows:

1. It introduces an unstable element into the system.
2. It interferes with the introduction of administrative changes.
3. Under a contributory system, it introduces an element of unfairness as between classes of employees and as between individual employees of the same class.

SUPERANNUATION OR SERVICE BENEFIT

4. Under a contributory system, it necessitates changes in the rates of contribution from time to time.

As most persons agree, in a general way, that some relationship between salary and superannuation retirement benefit is desirable in a complex service, these objections to the technical method, which has to be used to provide a direct relationship in a system to be operated on the scientific actuarial reserve basis, demand special consideration.

The persons who maintain that a salary scale introduces an unstable element into the fund take issue with the assumption that the rates of salary change as shown by a study of the present force or of the force of the immediate past can be safely used as a basis for anticipating future rates of changes. Against this assumption, four principal arguments may be introduced.

Introduction
of Unstable
Element

First, the economic forces upon which the general level of wages and salaries depend are not in condition of stable equilibrium, but they may change considerably, sometimes almost without warning, so that the rates for one year are different from those for the next. Salaries, however, especially government salaries, are less susceptible to violent fluctuations, but they may vary considerably over periods of years, as they are influenced by such fundamental forces as the supply of and demand for labor and the supply of and demand for money in its broad sense. In other words, the actuary who is forced to establish a salary scale is not dealing with the resultant of forces that are in fairly stable equilibrium, as he is, for instance, when he considers mortality rates, but he is dealing with the resultants of forces which are in unstable equilibrium and which may each act differently in times of economic crises, economic depression, economic expansion or war and the difficult financial readjustments that follow it.

Second, the relative importance of different classes of employees, grouped together in forming the salary scale, in order to get a sufficient body of data with which to work, may

RETIREMENT OF PUBLIC EMPLOYEES

change materially. Not infrequently in commercial undertakings, more low grade positions are created without a corresponding increase in the number of administrative heads, and as a result, the average salaries in the future will not rise so much as the salary scale would suggest. Not infrequently the actuaries make an arbitrary adjustment in the scale to allow for this probability. In the government service, new higher grade positions may be created without a corresponding increase in the lower grades, as the government enters new fields of activity. If great numbers of persons are already employed, averages may not be greatly affected unless a very large new service is added; but, if the number of employees is small, a large addition may materially change the salary scale.

Third, movements for salary changes may be successful. Sometimes these movements apply to all employees and sometimes only to a particular group. Sometimes they seek a uniform proportionate increase for all involved, sometimes for a total readjustment of the salary grades and classes. Changes of this nature cannot be anticipated by the actuary in establishing a salary scale.¹⁷

Fourth, the elimination of the superannuated and the disabled through the introduction of a retirement system in the government service will undoubtedly increase the rapidity of promotion, and more men will reach the higher positions than was the case before a system was introduced, and they will reach high positions at younger ages.

To guard against the instability that may result in the system because of these four factors, and possibly others, constant watch has to be kept over the fund, and if actual experience shows that the salary scale was only imperfectly applicable, changes in the rates of contribution under the scheme

¹⁷ The "equal pay act" by which the salaries of men and women teachers of the New York schools were equalized resulted in an increase in the liabilities of the retirement fund. See Report on the New York School Teachers' Retirement Fund, New York, 1915, p. 93.

SUPERANNUATION OR SERVICE BENEFIT

have to be made to remedy the defects developed, or else the government may have to make heavy payments under its guarantee of solvency. Under a contributory scheme, an increase in rates is, of course, unpopular, whereas a decrease is popular, but knowledge that the scheme provides for a possible change of rates to employees already in the service causes distrust, and furnishes a ground for opposing the legislation establishing the system that finds a fairly general response among younger employees.¹⁸

The second fundamental argument advanced against the use of a salary scale is that it interferes with the introduction of administrative changes. The need for thorough revision of the antiquated scheme of salary classes at present in use by the Federal Government, to make it fit the conditions brought about by the partial abandonment of the spoils system and the introduction of the merit system, and to establish a much closer relationship between the work which the employee does and the compensation which he receives is, of course, notorious. If, however, a retirement system, providing a superannuation benefit directly related to salary and operated on the actuarial reserve basis, were in effect in the United States service, this necessary reform could not be undertaken without involving the whole financial condition of the fund. The Congress might find in the financial deficit, which would be created in the retirement system reserve funds, a strong argument for preserving the existing status. In public services, in general, it is probably true that the need is rather for making salaries and wages more immediately responsive to changes in general economic conditions than for making them less responsive by introducing new forces that tend to rigidity.

The third argument against the use of a salary scale,—that under a contributory system it introduces an element of un-

**Interference
with Admin-
istrative
Changes**

¹⁸ The right to change the rates in respect to future entrants is of course necessary. If changes become necessary in respect to employees already in the service the cost should perhaps be borne by the government. See discussion, p. 100.

RETIREMENT OF PUBLIC EMPLOYEES

The Introduction of an Element of Unfairness as Between Employees

fairness as between classes of employees and as between individual employees of the same class,—has its origin in the fact that the salary scale is based on averages. It assumes that the salaries of all employees will advance at exactly the same rate as the salaries of the average employee. Unless the office has a uniform system of salary increases, based solely on length of service, this assumption is far from the truth; generally, certain groups of employees have little chance to advance far above the entrance salary, whereas for another group the chances may be very great.¹⁹ Technically the two groups may be scarcely distinguishable; they may work side by side in the same office, yet the general difference may be well understood among the employees themselves. Since the rates of contribution for the two classes of employees are alike, on the assumption that both will receive advancement at the average rate, and will leave on a retirement allowance based on the entrance salary increased by average rates of promotion, the least favored group will pay for more than it receives, because it did not advance at the average rate; whereas, the most favored group will pay for less than it receives, because it advanced at a rate above the average. An employee who receives rapid promotion comparatively late in his active career will contribute on the basis of his high salary for a short time only, whereas the one who rose to the top early in service contributes on the basis of his high salary for a very considerable period, yet, if both retire on a superannuation benefit directly related to terminal salary, each will receive substantially the same benefit, though one paid more for it than another. To the group of employees who are least successful and who have received few if any promotions, it seems like a case of “unto him who hath shall be given and from him

¹⁹ For tables contrasting the changes in average salaries, according to age and according to service, for different classes of employees in the Federal Government see “Statistics of Employees, Executive Civil Service,” by Lewis Meriam, Bulletin 94 of the U. S. Bureau of the Census, Washington, 1908, pp. 42 and 44.

SUPERANNUATION OR SERVICE BENEFIT

who hath not shall be taken away even that which he hath.”²⁰

Three answers have been given to the employees who have advanced this sort of argument, and mention of them should be included. The first is that all employees start with an equal opportunity for advancement and, therefore, each has an equal chance of being the winner at the expense of the others. Such an answer rarely appeals to the aggrieved class, as they regard the equality as purely theoretical; and, although cases can be pointed out where exceptionally brilliant employees, entering without special training and without the advantages of education, have risen to the top, yet the employees recognize that general rule of life which results in the establishment of educational systems and leads to the prescription, by civil service commissions, of educational tests for the better grade positions that offer the brighter chances for advancement. They prefer to have the equality offered to them based on the general rule, and not on the exception. The second answer is given under a partially contributory system. It is that the benefit which the employee gets is at least as much as his own contribution without any grant from his employers would purchase, and that is all he can demand as a right. The contribution of the employer, it is argued, is made to the fund, not in behalf of each individual employee as a distinct unit, but in behalf of the whole body of employees as a class and, therefore, the employer has a right to distribute his contributions among the employees as he sees fit. The employees on entering, it is argued, know the conditions laid down by the system; it is part of their contract of employment; and they have no proper ground of complaint. If it is clearly demonstrated that the employee does get all he himself paid for and if at the outset the employees distinctly understand that the government pays little or nothing for the retirement of the men

Three
Answers to
Argument of
Unfairness

²⁰ For evidence showing strong feeling in this matter, see the Report of the Committee of the Board of Trade on Railway Superannuation Funds, British Parliamentary Papers, 1911, Vol. 29, especially the testimony of Mr. A. G. Walkden, p. 18.

RETIREMENT OF PUBLIC EMPLOYEES

who do not advance above the entrance salary, whereas it pays a very large amount for the men who are highly successful,—under a terminal salary plan a startlingly high amount for the man who is successful in the very last years of his career,—the scheme may be defensible on the equitable ground of notice. From the social point of view, it seems a queer procedure. The poor man has a far smaller margin than the rich man between earnings and the minimum of subsistence, yet the government does relatively more for its well-to-do employees than for its poor ones. The third answer may have more weight than the others, but it needs further investigation and it is not necessarily applicable to all schemes. It is that the lower paid employees become superannuated and retire at an earlier age than the more highly paid ones, and, hence, they make fewer contributions to the fund and receive more retirement benefits from it. In other words, their superannuation benefits are relatively more costly than those of the more successful men. This answer was given to employees of private companies under schemes which had no compulsory retirement age, and in which the higher employees were the ones who decided who was superannuated. It is questionable how far it would be applicable in a government system in which retirement at a fixed age was compulsory and in which men, if not women, would tend to remain until the compulsory age, unless actually forced out by the condition of their health.²¹

²¹ This question of the equities as between different classes of employees was one of the issues between the railroads and their employees in the hearings before the Board of Trade Committee on Railway Superannuation Funds. The concensus of opinion among the actuaries seemed to be that the inequities complained of by the lower grade employees were apparent rather than real. The actuaries' reasons are summarized above. Persons interested in retirement funds, either public or private, will find this report on Railway Superannuation Funds, both the report itself and the testimony, an illuminating document. It is a model investigation. The work of the committee was greatly strengthened because it had as a member an experienced actuary, Mr. Duncan Fraser, who directed the taking of the actuarial testimony very ably. See British Parliamentary Papers, 1910, Vol. 57, and 1911, Vol. 49.

SUPERANNUATION OR SERVICE BENEFIT

The final argument against the use of the salary scale is that it necessitates changes from time to time in the rates of contribution under a contributory scheme. This difficulty is not insurmountable because the government can guarantee the salary scale in respect to present employees and make good any deficits arising from the general treasury. It need not formally reserve in its retirement legislation any right to change rates in respect to future entrants because such a right is one which the legislative body could not abrogate. The question is one of how far guaranteeing is advisable; the government may guarantee nothing or it may guarantee an interest rate, mortality rate, withdrawal rate, salary scale and all the other rates that the actuary has to use in working out an actuarially elaborate scheme.

Necessity
for Read-
justment of
Rates

In concluding the discussion regarding salary scale, it may be well to quote the statement of Mr. William Sutton, Actuary to the Central Office of the Registry of Friendly Societies, in advising the Select Committee on School Board (London) Superannuation Bill in 1891,²² advice which ultimately resulted in the establishment of the English Elementary School Teachers Deferred Annuity Fund, a system in which the amount of benefit is absolutely independent of salary, being the annuity which a fixed annual contribution will buy, supplemented by a grant from the government.

Statement
of Mr.
William
Sutton

“It may be said that with few exceptions superannuation funds as generally constituted are radically wrong in principle when looked at from the actuarial point of view. Instead of resting content with the introduction of as few assumptions as possible, they are made to involve not only assumptions as to the rates of mortality to be experienced among the members and as to the rate of interest to be earned by the accumulated funds—these may be fairly said to be indispensable—but they are also

²² British Parliamentary Papers, 1890-01, Vol. XVII. p. 134.

RETIREMENT OF PUBLIC EMPLOYEES

made to depend upon such capricious elements as the rates of secession of members (that is of members leaving active service, otherwise than by death or retirement) and the rates of salary the members will receive and on which the nature and amount of their contributions to the fund will depend as well as the amount of the pension they will receive. It thus follows that in bringing into the question of rates of secession and rates of salary, matters which cannot be prognosticated with any certainty for any length of time classes of members get lumped together whose real circumstances and conditions in respect of these matters are as different as possible. In the particular case now before the committee this would certainly seem to apply. Thus, for instance, it appears to have been considered that a large proportion of teachers with comparatively small salaries would secede in the early years of membership, whereas it may be on the other hand safely inferred that members of the official staff as distinguished from the teachers' staff would rarely secede. Again, by fixing a uniform percentage deduction from salaries the further assumption is implied, contrary to the facts, that all members of the fund will have their salaries uniformly and proportionately increased throughout membership, with the result that the classes of members where salary only rises to a small extent, or is practically stationary, will be called upon to pay heavier contributions to meet the shortcomings of those whose salaries have throughout membership steadily if not heavily increased. Put in another way, this is exactly one of the financial blunders which has been more or less the cause of the downfall of countless friendly societies.

"There is the further objection that all schemes of this kind, if properly considered, seriously hamper the administrative body to which the members of the fund are subject. For instance, it may be considered expedient by

SUPERANNUATION OR SERVICE BENEFIT

that body to raise the age of admission in a certain class of its members, a step probably very wise but which may be of serious menace to the superannuation fund. On the other hand, the same body of men may consider it desirable to compulsorily retire a certain class of members at an earlier age than that contemplated in the finances of the fund."

The principal reason for favoring a direct relationship between the amount of superannuation benefit and the amount of salary is, as mentioned above, to provide an equality in the rate of sacrifice on retirement for all classes of employees, on a money basis. This argument, if allowed to dominate, would lead to the establishment of a superannuation benefit based on the salary of the last year, as that involves the least change from a man's standard immediately prior to his retirement. Such a provision gives maximum weight to all the objections urged against the salary scale, because it decreases the stability of a fund on the actuarial reserve basis, it interferes with administrative changes, it introduces an element of unfairness as between different classes of employees and different employees of the same class, and under a contributory system it necessitates a reservation of a right to change the rates or a government guarantee that may result in fairly large payments. It may lead, moreover, to the making of promotions to high positions the year immediately preceding the age of retirement or the expected retirement so that the favored employee may have a high benefit. Certain positions with good salaries attached might be reserved as sort of a gang plank across which many would pass in leaving the active rolls to go on the retired list.²³ It also tends to discourage any

The
Terminal
Salary
Plan

²³ "The plan of basing the pension on the last annual salary received is not one to be recommended in connection with these funds; for when the pension is to come out of a fund, and not directly out of the employee's pocket, a man's salary is often raised before his retirement to enable him to retire on a substantial pension; and it is generally the highly paid officials who are thus treated. This is some-

RETIREMENT OF PUBLIC EMPLOYEES

reduction of salary or any assignment to lower grade work, in the case of employees who are still very useful but are not able to continue to bear the full responsibilities of their positions, because any reduction would mean an unfair reduction, lasting throughout life, in the amount of the superannuation benefit.²⁴

Two Variations of Terminal Salary

To obviate these objections, two variations of the terminal salary plan have been tried or suggested: (1) basing the amount of superannuation benefit on the average salary earned in a certain number of years immediately preceding retirement, and (2) basing the amount of the benefit on the salary earned in a certain year, a fixed number of years before the last. Obviously the longer the period over which the average salary is taken, the less become all the dangers of the terminal salary basis. The scheme to base the benefit on the salary of a year a certain number of years before the last has been suggested for use in private superannuation retirement systems where no compulsory age is introduced and where employees fear the danger that their compensation may be deliberately reduced in the last years of service for the sake of keeping down the cost of their retirement.²⁵ In the government service where this danger is not likely to arise and where compulsory

times mitigated by basing the pension on the average of the year's salary; but a much better plan would be to base it on the salary received three years before retirement."—"Staff Pension Funds," by H. M. Manly in the *Journal of the Institute of Actuaries*, Vol. 36, 1901-2, p. 241.

²⁴ The following extract from the Report of the Committee on Railway Superannuation Funds is of interest in this connection: "Under the average salary system an apparent hardship is imposed in . . . cases of reduction of salary from the consequent reduction in the members' pension, and this is accentuated when the pensions are given on the last seven years' average system. In certain of the guaranteed funds there is a rule that if the salary of any member shall be at any time reduced, he shall be entitled to continue his contributions based on his salary as unreduced and to receive benefits on the like basis. We consider that this rule is an eminently fair and just one which it might be well for all the funds to adopt."—British Parliamentary Papers, 1910, Vol. 57, p. 26.

²⁵ See note 23, page 137.

SUPERANNUATION OR SERVICE BENEFIT

retirement ages are probably more necessary, this scheme seems to have no advantage over the average salary of the last years. Both represent a departure from the ideal held by some of a proportionately equal money sacrifice for all employees of the same length of service upon retirement.

Basing the benefits on the average salary throughout service represents a still further abandonment of this ideal. It reduces to a minimum the objections against the employment of the salary scale, and is less open to the objection that improper promotions will be made toward the end of service or that the scheme will result in holding men at the very highest positions to which they ever attain until they are eligible to retire, regardless of any decrease in their capacity to fill them. Since the salaries for a large number of years are averaged, what may be done in the last few years of service has relatively little effect on the final result. If economic changes of one kind or another take place, or if administrative changes are made, the cost of the benefits due the older men will be very little affected because their salaries will be subject to these changed conditions for only a few years, and, if the right to alter the rates of present employees is reserved, the rates for the younger employees can be so adjusted as to overcome the financial difficulties introduced by the change. Of all the schemes providing a direct relationship between salary and benefit, it is the one that results in the least connection between the salary that the man is earning on the day he retires and the benefit that he receives as a retired employee, but, on the other hand, it is the soundest scheme providing a direct relationship with salary and the fairest one as between different classes of employees and different members of the same class.

The
Average
Salary
Plan

Benefits Indirectly Dependent on Salary. Benefits indirectly dependent on salary are provided, as has been previously explained, by making the annual contributions paid by the employee or on his behalf, bear a fixed relationship to the amount

Method of
Operation

RETIREMENT OF PUBLIC EMPLOYEES

of his salary, and by having the amount of the benefit determined by the purchasing power of these annual contributions. The amount of the contribution may be so fixed by the founders of the system that the benefit will be just about what they think it should be in the average case. In cases which depart from the average, the benefit which the employee gets will also depart from the average. Each employee receives an exactly equal value for his contributions or for the contributions made in his behalf. In fact, the indirect relationship scheme is sometimes contrasted with the direct by saying the indirect results at retirement in equality of return, the direct, in equality of sacrifice.

The indirect relationship scheme is sometimes spoken of as a savings bank scheme, or a compulsory savings and annuity scheme, as generally it is at least partially contributory and often provides for a return of contributions in event of the employee's death or withdrawal from the service. The general nature of such schemes can perhaps be made clear most easily by describing a simplified one, in which all the funds are assumed to be contributed by the employees, each of whom pays a contribution of a fixed percentage of his salary each month, which is deposited in the fund to his account to accumulate at compound interest. If he dies in the active service, resigns for any cause, or is dismissed, the whole of his accumulations with compound interest, at the rate earned by the fund, is returned to him or his representative. If he survives in the service to the retirement age, the amount then standing to his credit with all the interest that it has earned is used to purchase for him such an annuity as it will for the balance of his life. The amount which he will receive as an annuity will depend on three factors: (1) the size of his annual contributions; (2) the rate of interest which is being earned by the accumulations; and (3) the rate of mortality among the annuitants, or retired employees, upon which would depend the number of payments that would have to be paid.

Such a system would obviously introduce a minimum

SUPERANNUATION OR SERVICE BENEFIT

amount of financial instability into the fund, since the only actuarial assumptions which would have to be made would be the rate of interest to be earned by the fund after the retired employee enters upon his annuity and the rate of mortality among the retired employees. The government could, without involving itself in very heavy liabilities, guarantee a conservative rate of interest. The rate of mortality can be fairly accurately determined in advance through a thorough investigation of the past experience of employees of that particular class. The rate of mortality, as especially determined for a given class of employees, living under more or less the same conditions in respect to occupational risks and other economic and social conditions, is determined mainly by the operation of natural forces which are in a state that approaches stable equilibrium. General mortality tables applying more or less to men of all occupations and industries can even be used at the outset, but they are of strictly limited applicability and have to be selected and used by an expert, because, even if devised as a basis for the sale of annuities, they may not represent conditions which will exist in a particular group of public employees. If made up as a basis for life insurance premiums, they are almost totally inapplicable unless a wide margin of correction is applied. If a life insurance company uses a mortality table giving too high a death rate, it is safe because the number of death claims it would have to pay might be reduced and the time at which it would have to meet the claims would be postponed, and hence its losses would be less, but if an annuity fund used that same table, it would go bankrupt because it would have to pay its annuitants more times than it figured on paying them, since they would live longer than the table indicated. If the mortality table is properly developed from past experience, or even if conservatively selected from existing data, the fund established as described on the indirect relationship to salary basis should be absolutely sound and should remain sound with less readjustment than any other general type except a straight compulsory savings

Maximum
Financial
Stability

RETIREMENT OF PUBLIC EMPLOYEES

system, which gave on retirement not an annuity, but merely the total amount of the accumulation.

Absolute
Equality
of Return

That it produces absolute equality among the employees is one of the principal arguments in favor of such a system. If two men of the same age each contribute a dollar, and if both retire at the same age, each gets the same amount of annuity or benefit for that dollar, though the first be an unskilled laborer whose wages have been the same throughout his services and the second one of those rare exceptions who rise from a job as messenger boy to occupy in the last few years of his career one of the highest positions in public employment. If all contributions made by the employee or in his behalf are repaid to him or to his representatives on death or withdrawal, or if accruals to the fund by deaths or withdrawals are equitably distributed among the survivors, this system produces equality of return because each gets what his own money, or his own money plus his share of the profits, will buy.

Objections
to Method:
Insufficiency
of Benefit

The principal argument advanced against this system, broadly speaking, is that it will only produce the desired benefit in the average case, and the exact average case may occur very rarely. In numerous instances, men may retire before the average age and before they have served the average number of years and in these cases the amount of annuity available for them will be small. They will have made few contributions and those they have made will have been at interest but a short time; and an annuity, with first payment beginning at an early age, is very expensive because many payments will probably be required. If the attempt be made to meet these cases of early retirement by raising the contribution rate, the rate becomes prohibitively high, and in case of men who stay beyond the average age or serve longer than the average number of years yields a far greater benefit than is needed. The man who remains long in the service obviously makes many contributions and receives much assistance from the accumulating power of compound interest which adds larger increments to a man's accumulations in each successive year, and

SUPERANNUATION OR SERVICE BENEFIT

consequently, when he reaches an advanced age he has a relatively large sum to purchase an annuity and at that age annuities are cheap. He gets, therefore, a larger annuity than he needs. Since he has paid for it himself, it is hardly fair to say that it is larger than he should have, except, perhaps, from a very extreme social point of view.²⁶

This objection manifestly precludes the selection of this type of system for use by itself in providing a disability benefit, for the man disabled in early life cannot possibly have his whole future provided for by the little he is able to save from his salary in the first few years he is in the public service. For a disability benefit some form of insurance has to be provided, so that the many who are fortunate enough to escape disability in the early years of life will pay, directly or indirectly, for the few who have to be retired because of accident or disease. But the fact that a mechanism devised to provide a superannuation benefit in a retirement system will not also provide a disability benefit is not a conclusive argument against it, because the different benefits can easily be provided in different ways and all can be combined in a single system which

Inapplicable
as Disability
Provision

²⁶ The following quotation from testimony of Mr. T. G. Ackland, F.I.A., given before the Committee on Railway Superannuation Funds, is a typical illustration of this criticism (British Parliamentary Papers, 1911, Vol. 29, p. 200, q. 5400):

"I consider that on the whole the average salary basis is best adapted to the circumstances and working of the Superannuation Fund of a railway company, although in the case of funds established in connection with private firms or commercial companies or municipal boroughs, I have found the 'final salary' basis or the average of the last seven years' salary to work well and equitably. I regard the 'average salary' basis as a sort of compromise between the extreme cases of (1) the 'money value' basis where there is equality of return, and (2) the 'final salary' basis where there is equality of rates of sacrifice. The 'money value' basis operates unfavorably against those who retire early from breakdown or at the earliest optional age, giving them quite inadequate pensions whilst, on the other hand, they who retire very late in life receive under this system unduly high pensions. The 'final salary' basis on the other hand operates unfavorably to men of low salaries as compared with those of high salaries, especially if the latter have been obtained by large increments as the retiring age was approached."

RETIREMENT OF PUBLIC EMPLOYEES

will be easy to operate. Each mechanism should be considered on its merits as a means of providing not a complete system of benefits but one specific benefit. The question of adjusting a superannuation benefit indirectly dependent on salary to a disability benefit directly dependent on salary or entirely independent of it can be considered to better advantage in the chapter on disability benefits.

Weight of Objections

The extent to which the superannuation rules must permit variation from average conditions obviously determines the weight which should be given this main objection against basing the amount of benefit on the amount of contributions in devising a superannuation retirement system. If the superannuation rules permit a fairly wide variation between the earliest age at which a man may retire and the maximum age at which he must retire, or, if they do not provide for compulsory retirement, the argument may have a good deal of weight, provided the variation is required for the welfare of the service. If, on the other hand, early retirement is not permitted on a superannuation benefit, but can take place only on a disability benefit after medical examination and, if the difference between the permissive age and the compulsory age for superannuation retirement is not great, the argument, it would seem, could be more or less disregarded. The case of the man who remains after the minimum age, or after the average age, can, moreover, be met by the device used in the plan for Massachusetts state employees of having all contributions stop when an employee fulfills a certain period of service. From that time on his benefit increases only from the interest earned and from the decreasing price of annuities. By such a provision and by prohibiting early retirement except for proved physical or mental disability, this objection is largely overcome.²⁷

Two other arguments are advanced against this system of basing benefits on the amount of contributions, first, that it

²⁷ See Report of Massachusetts Commission on Pensions. Massachusetts House Document, No. 2450, Boston (1914), p. 192.

SUPERANNUATION OR SERVICE BENEFIT

does not give a large enough benefit to the man who enters the service at a late age and, second, that the relationship between the amount of benefit and the salary is not sufficiently close. These objections can be overcome in part by the introduction of one of the more elaborate variations of the scheme. They are chiefly applicable to a system that establishes a uniform percentage of contribution applicable to all employees regardless of their age on entering the service, or its equivalent, the scheme which divides the employees into classes by salary and requires from all in the same salary class the same amount of contribution regardless of their age on entering the service.

Elaborations
Suggested to
Overcome
Objections

The percentage of salary to be contributed by or in behalf of each employee may be determined by his age at entrance into the service. The actuary can figure these percentages in such a way that if the employee enters at the specified age and remains to a given age and advances according to the average rate in salary, the retirement benefit will bear the desired proportion to either the average salary or some form of the terminal salary. In other words, he can work out the same premium rates, or rates of cost, that he would use in establishing a superannuation benefit directly dependent on salary and these rates could be paid by each employee. In those cases where the history of the employee conformed to the averages as used by the actuary, the benefits would be the same as they would have been under the other system, but in those cases where the history did not so conform differences in the benefit would arise. The employee who left before the average age would get less than the average benefit and the one who remained longer would get more. The man who progressed more rapidly than the average would get less benefit in proportion to his final salary than the man who did not progress so rapidly, because no portion of the contribution made by the less successful man would be utilized to pay benefits to the more successful. No danger to the solvency of the scheme would result from such a use of the salary scale

RETIREMENT OF PUBLIC EMPLOYEES

in fixing on the rates of contribution because the employee would never be promised a definite proportion of any salary; he would be promised merely the amount his contributions or the contributions made in his behalf would buy. No change in salaries, therefore, could affect the liabilities of the system.

Another variation is to fix the percentage to be contributed at entrance at such a point that if the employee remains without promotion to the assumed retirement age he will receive a benefit of a fixed proportion of his entrance salary. If an employee is promoted, the amount of the promotion is subject to a new percentage, namely, the rate which would have been charged a new employee joining the force at that age. In other words, a higher rate is charged on each promotion than was previously charged. Such a procedure obviates the necessity for using a salary scale, and it takes no more from the salary of the man who does not advance than is necessary to provide the precise superannuation benefit that is regarded as necessary. He does not come out at the end with a benefit that is larger in proportion to his salary than that which the other men receive. When the employees are promoted, their increase in salary brings not only the necessity for paying a larger premium but also the means of paying it. After a certain age, however, this process would become impossible because the cost of a proportional addition to the benefit would be greater than the amount of the increase in salary.

Elaboration
of Accounts

Against these various schemes, basing the amount of benefit on the accumulations, the objection is sometimes raised that they necessitate keeping an individual account for each employee and, in case of this last scheme, where each promotion means a change in the percentage of contributions, these individual accounts might become extremely complicated.²⁸ An

²⁸ The Departmental Committee on Superannuation of Teachers in Public Elementary Schools (British Parliamentary Paper, 1895, Vol. LXXVI) recommended against the proposal to have teachers contribute in proportion to the excess of their salaries over certain amounts partly on the grounds of the complication of accounts. See p. 10 of their report.

SUPERANNUATION OR SERVICE BENEFIT

objection of this kind can hardly be considered on the broad basis of general principles, as it involves matters of rather minute detail. In all probability, any retirement system scientifically administered will require an elaborate system of records. The administration of the retirement system should, however, be closely related to the civil service commission or other selecting agency and to any division of standardization of personnel and one report from a department or office of a change in personnel should furnish the basis for the records of each of them. Whether a particular retirement device will involve so great an additional cost of administration as to make it of doubtful value is one that must be considered in each particular instance by the actuary, working in close association with the numerous governmental officers involved.

In connection with this question of complication of administration, one device, used at least in part of the English civil service, is of interest. Certain deductions have to be made from the salaries of the employees to pay the income tax, and the employee can authorize the government to pay for them certain life insurance premiums. To avoid a multiplicity of detailed deductions, the government pays at the regular monthly pay days a fixed proportion of the salary somewhat less than one-twelfth. At the end of each quarter, a considerable sum has been withheld from each employee. From this sum all the deductions are made quarterly and the employee is then given the balance.²⁹ Under such a system, the machinery for the regular salary payments is no more complicated than under an ordinary system providing for no deductions. All deductions could be made quarterly or semi-annually. By the introduction of some such device the problem of operat-

²⁹ "A civil servant only gets 8 per cent of his salary each month, and gets his balance, minus income-tax and other deductions at the end of the quarter."—Mr. John J. Duffy, testifying before the Royal Commission on Civil Service, Fourth Report of the Commissioners, British Parliamentary Papers, 1914, Vol. 16, p. 209, q. 27, 476.

RETIREMENT OF PUBLIC EMPLOYEES

ing a contributory system with varying payments by each employee could doubtless be worked out at a fairly reasonable cost.

THE AMOUNT OF THE SUPERANNUATION BENEFIT AND LENGTH OF SERVICE

The relationship between the amount of benefit and the length of service is the second of the three broad divisions into which the question of the amount of benefit has been divided to facilitate discussion. It is, of course, closely connected with the first, which has just been considered, the relationship between the amount of benefit and the amount of salary or wages. In a system that requires certain annual contributions by or in behalf of the employee and bases the amount of the benefit on the purchasing power of these contributions, a relationship between the size of the benefit and the length of the service is manifestly natural and inevitable, because the longer a man serves the more payments he will make, the more interest his payments will earn, and, as he grows older, the less a life annuity will cost. In such systems, moreover, the relationship is not only inherent in the scheme, but the exact extent of it is largely fixed by mathematical laws. In the other systems the existence of a relationship is optional, and the extent of any relationship can, to a considerable degree, be determined by the persons who establish the system.

Defects of
System Not
Establishing
Relationship

The Desirability of Relationship. The reason why some relationship between the amount of superannuation benefit and the length of service is desirable can perhaps be most easily brought out in a negative way, by considering the defects of a system which does not provide one, but gives the same benefit to all, or to all of a given salary class, regardless of the time they have served. Under a contributory system providing equal benefits for all regardless of service and requiring a uniform contribution, or rate of contribution, from all regardless of age or length of service, the man who enters

SUPERANNUATION OR SERVICE BENEFIT

young and stays to the retirement age pays far more than is necessary to raise his own benefit; the surplus goes to pay for the benefit granted the man who entered at a more advanced age and has not had time to contribute the cost of his own retirement. Under such a system the young entrant pays the cost of retiring the older entrant. An attempt may be made to overcome this difficulty by requiring the older entrant to pay a higher premium, but the highest premium the oldest entrant can afford to pay will not purchase a benefit that is sufficiently large to meet the average requirements of a retirement system, if there be much difference in age between young entrants and old entrants. If all enter at about the same age and retire at about the same age, a sort of natural service relationship exists; but, if such is not the situation, the allowance for the older entrants with shorter service has to be reduced, so that the small benefit paid to that class may be the exception, and the larger, more satisfactory benefit paid the younger entrant with longer service may be the rule.

Inequitable

This objection probably applies, though possibly with less force, to a non-contributory system providing benefits the amount of which is not related to length of service. The young entrants will have a grievance that those who worked but a few hours receive the same reward as those who toiled through the heat of the day. Socially and economically speaking, the younger entrants probably deserve more, for not only have they earned it, but all their provisions for old age must come from this one employment whereas in many cases the older entrants may, or perhaps should, have made some provision in the years before they entered the service.

A further danger arising from an absence of relationship between the amount of benefit and length of service is that if the system permits the employees any option regarding retirement, it places a premium on retiring early. The actual salary to be earned becomes the only inducement to remain in harness, since increased service means no increase in superannuation benefit. If any option regarding age at retirement is

Early Retirement Encouraged

RETIREMENT OF PUBLIC EMPLOYEES

introduced, an increasing benefit with increasing length of service may be regarded as imperative to overcome the operation of a sort of economic law or law of nature which makes the difficulty of securing new employment increase with increasing age. A pension independent of service tempts a man to retire at the earliest possible moment so that he may enter some new employment which, with his superannuation benefit, will give him a good living. If his earnings in his new employment plus the amount of his benefit is the least bit greater than his active salary, he can figure an immediate financial profit from the change, and sometimes when the new combination does not show a monetary advantage the employee may consider it for his best interests, as it may have better prospects of lasting for life. An employee who thus retires to take up other pursuits becomes a subsidized competitor against other old men, and the creation of such a class must be guarded against by offering the employees an inducement to refrain from exercising their option to retire so long as they are still able to perform the duties of their position. An alternative remedy sometimes suggested is to prohibit the employee retired on a superannuation benefit from entering any gainful occupation, but such a procedure is not only the imposition of a cruel and unnatural penalty on the employee, it is contrary to that public policy which demands that for the good of society we shall all be productively employed so long as we are able to produce.

Relationship
Necessary

A relationship between amount of superannuation benefit and length of service may, therefore, be regarded as necessary to do justice between the employee who has served a long time and the one who has served only a short time and to offer the employees an inducement to render long service.

The
Methods
Described

Two Methods of Establishing Relationship. Two general methods of introducing a relationship between amount of the benefit and length of service may be tried. First, the amount of benefit may be determined by the amount of the

SUPERANNUATION OR SERVICE BENEFIT

contributions paid by or in behalf of the employee, and thus a relationship based mainly on the operation of mathematical laws will automatically arise, and, second, an arbitrary scale of increases may be provided. To describe all the various arbitrary scales of increasing benefits that ingenious persons may devise is clearly impossible. Perhaps the commonest form is to grant a certain proportion of salary for each year of service, sometimes with a maximum limitation, especially if no compulsory age of retirement is fixed. The English Superannuation Act of 1859, for example, granted "To any person who shall have served ten years and upwards and under eleven years an annual allowance of ten-sixtieths of the annual salary and emoluments of his office. For eleven years and under twelve years, an annual allowance of eleven-sixtieths of such salary and emoluments; and in like manner a further addition to the annual allowance of one-sixtieth in respect of each additional year of such service until the completion of a period of service of forty years when the annual allowance of forty-sixtieths may be granted; and no addition shall be made in respect of any service beyond forty years." The act of 1909 substituted eightieths for sixtieths and granted certain new benefits that compensated for the change. In the earlier act forty years' service gave a retirement allowance of two-thirds pay; in the latter, only half pay. Another scheme tried has been not to make a change each year, but to establish wide steps such as half pay after thirty years' service and before forty years, two-thirds pay after forty.

The system that bases the amount of benefit on the purchasing power of the contributions, as was discussed more at length in the preceding section, has two marked advantages; it enables each employee to get the same proportionate return for his contributions, and it may easily be made financially sound, because it is actuarially simple. It places a great premium on remaining in the service until the compulsory age of retirement, because the amount of benefit which the contributions will purchase increases each year at a rapidly accelerat-

Basing
Amount of
Benefit on
Purchasing
Power of
Contribution

Merits
and
Defects

RETIREMENT OF PUBLIC EMPLOYEES

ing rate. This feature is, indeed, one of the chief grounds for objecting to it; it is said that it may offer too great an inducement to hang on, because each additional year means such a great increase in superannuation benefit or conversely because early retirement involves so great a loss. It necessitates, too, a high scale of contributions, if the man who retires at the minimum age is to receive a reasonable benefit. Under some of the other systems, the man who retires early does so at the expense of him who remains longer, but under this system each man pays for himself alone. These objections can, to a certain extent, be overcome by having a fairly narrow margin between permissive age and compulsory age for retirement and by having compulsory contributions stop at the minimum age if the superannuation benefit has reached a certain minimum amount.

Elaborations to Overcome Defects

Further elaboration of the scheme by having the interest earned revert to the fund if an employee were continued after the general retirement age is conceivable, though contrary to the general theory of equality of return on which schemes of this type have been based. Such a device would be equivalent, perhaps, to a rapidly progressing reduction of salary for all who remained after the general retirement age, but it would be disguised, for the man retained would continue to draw the same active salary but would lose the steadily increasing interest on his retirement accumulation. If some satisfactory way of apportioning this interest, after it was actually earned and in hand could be worked out, so that it would be used for the benefit of those who were forced to retire early, the device would seem to have some merit. It would increase the amount of benefit to those who retired early; and it would do so entirely at the expense of those who remained beyond the general retirement age. A lower compulsory age of retirement could be adopted with a provision like that now in the English civil service that in special instances men might be retained for an additional period not to exceed five years. During this five years their retirement allowance would in-

SUPERANNUATION OR SERVICE BENEFIT

crease somewhat because their expectation of life would be shortening, but they would know that the interest from their accumulation was being used for the fund as a whole and not for them. If it were desired to put further check on continuation beyond the general age, deductions might be continued beyond that age and be paid to the fund as a whole. Possibly at the outset the receipts from this source might be made a special fund managed by trustees elected by the employees and reporting to them and be used within certain general lines in their discretion, more or less as the English civil servants have established benevolent funds which meet the needs of special cases not adequately provided for by the increasingly rigid administration of a retirement system. The special advantages of such a device would be that, since the grants would not be made until the interest was earned and in hand, it would not enter into the calculations to establish and maintain the financial solvency of the fund, and the cost would not be distributed over all the employees as an insurance premium, but would be borne solely by those who were so exceptionally fortunate as to keep health and strength beyond the general average. One obvious defect of the device is that for the first few years of the system the fund would have no profit from this source, and the first few classes of early superannuation retirements would derive only their exact rights. Profits or dividends arising from such a source could not be promised as absolute rights; to preserve financial solvency they would have to be in all respect contingent, but, after the fund had been in operation for a long time, an employee might be able to judge with some fair degree of accuracy what he would probably receive from this source in case misfortune necessitated early retirement. Democracy of administration with full publicity of action would have to be relied upon to prevent abuse.

The arbitrary scale system has perhaps two advantages and three principal disadvantages. The first advantage is that by introducing an insurance element it permits all to get a

Determining
the Amount
of Benefit
by an
Arbitrary
Service
Scale

RETIREMENT OF PUBLIC EMPLOYEES

Merits and Defects

reasonably satisfactory benefit for a smaller contribution. It does this by giving the employee who retires early more than he would have received for his contributions under the other system, and it is able to do so because it takes from the employee who retires late in life something which he would have received under the other system. The second advantage, which may prove a doubtful one, is that it permits the persons planning the scheme to make it conform to what they conceive to be the exact needs of the service. The first objection is that an arbitrary scale more or less complicates the actuarial work and adds new elements of financial instability. If forces arise that lead to increased and unanticipated retirements in the early years of life, the proportion of retirements in later life will be necessarily reduced and that nice balance between profit from the long service man and loss from the short service man will be disturbed, and readjustment will be necessary. The actuary must either anticipate how the retirements are likely to occur or else assume that all will occur at the earliest age. If he assumes that all will occur at the earliest age, he will have to provide for a fairly large premium, thereby more or less sacrificing one of the advantages of the plan, and he will have to provide for distributing profits or else for a subsequent reduction of rates to employees who may not have contributed to the profits that permit reduction. The second objection is the loss of equality of return with the introduction of a possible danger that clean-living, energetic men, anxious to work so long as they are able, may have to pay for the early retirement of the lazy, the anxious-to-retire, and the dissipated. The third objection is that the supposedly ideal device for having benefits increase with service may not operate at all as its creators anticipated. One elemental rule must be reckoned with in planning such devices, namely, that the dominating force governing the great majority of employees is, not unnaturally, self-interest. Because of this fact, long periods between increases in benefits are undesirable. They result in a marked tendency toward selection against the sys-

SUPERANNUATION OR SERVICE BENEFIT

tem. The great majority of retirements will take place immediately after the employee has satisfied the minimum requirements for the advanced allowance; and except in cases of absolute necessity, employees will not retire in the period between steps. In the earlier English systems, the broad step device was tried. In the civil service, its evil effects were overcome by the treasury through an exercise of its discretionary power in fixing the amount of benefit, in such a way that small annual steps were substituted for the broad steps.³⁰ In the earlier police retirement systems, no benefits were granted except in the case of disability proved through medical examination, and broad service periods between increases were established. That distinguished statistician and actuary, William Farr, demonstrated that either the employees deliberately made a selection against the system or the effect of being eligible for an increased superannuation benefit was injurious to health, because almost all the retirements on account of ill-health took place immediately after the employee was entitled to a higher allowance.³¹ If the arbitrary scheme for establishing a relationship between the amount of benefit and the length of service is selected, experience would seem to indicate the advisability of selecting a simple device with small annual increments rather than more elaborate schemes which may permit of marked selection against the fund.

THE AMOUNT OF THE SUPERANNUATION BENEFIT AND THE ECONOMIC AND SOCIAL NEEDS OF THE EMPLOYEE

The relationship between the amount of the superannuation benefit and the economic and social needs of the employee is the last of the three broad parts into which this complex sub-

Four
classes
Enumerated

³⁰ See Report from Select Committee on Civil Service Superannuation, British Parliamentary Papers, 1856, Vol. IX, p. 153.

³¹ Report on the County and Borough and Metropolitan Police Superannuation Funds, by the Registrar-General, William Farr, M.D., F.R.S., 1862-66. Reprinted in part in Report from the Departmental Committee of 1889 on Metropolitan Police Superannuation, British Parliamentary Papers, 1890, Vol. 59, p. 163. Referred to frequently in hearings on the question of police superannuation.

RETIREMENT OF PUBLIC EMPLOYEES

ject of the amount of benefit has been divided. The nature of the topic of this third division is manifestly such as to preclude its treatment in anything except broad general terms without any attempt at precise definition, but fortunately this branch of the subject lies in a field the general terminology of which is popularly well understood. Using such general terms, we may distinguish four different types of benefits in respect to the economic and social needs of the employee, and one of these may be subdivided. These types are as follows:

1. An amount in aid of subsistence, but not enough by itself to permit an employee to live decently.
2. An amount which will secure the minimum of subsistence. This type may be subdivided on the basis of whether it regards the employee as an individual or as the head of a family. A minimum for the man himself is manifestly somewhat different than the amount for the man as a family head.
3. An amount which is above the means of subsistence and will permit the family to have the necessities of its standard of life.
4. An amount which will give the retired employee practically what he had as an active employee and involve little or no sacrifice on retirement.

The advantages and disadvantages of these different types solely from the point of view of the student of retirement systems deserve special consideration.

A Sum in Aid of Subsistence. The amount in aid of subsistence, which is insufficient to maintain a man decently unless he has other resources, has one distinct merit. It is cheap. It might also encourage thrift, because the employees, knowing that in the event of retirement because of old age they would have a little from the retirement system, might be led to save to supplement it. A small benefit of this nature is probably the best that can be done in the case of very late entrants

SUPERANNUATION OR SERVICE BENEFIT

into the service, if late entrance is to be permitted; and it has some things to commend it for use in a system for a very athletic service, if the employee is retired at an early age in the expectation not that he will remain idle for the rest of his life but that he will almost immediately enter some new employment. For a service in which an employee is expected to spend the whole of his working life it is probably impracticable. Unless accompanied by a compulsory retirement provision, it would result in retirements only in cases where men could no longer fulfill minimum requirements or where their private resources made it possible for them to quit. The great majority would continue in the active service much as they do in the absence of a system. If a compulsory retirement provision were enacted, many cases of extreme hardship would result, the service would be unpopular, and many valued servants would leave to take positions offering better retirement benefits or no retirement benefits and no compulsory age of retirement.³²

The Minimum of Subsistence. The minimum of subsistence for the employee alone differs only in degree from an allowance in aid of subsistence. It would cost somewhat more

For Em-
ployee as
Individual

³² Pensions of a very small amount are of course of real assistance to the beneficiary. In this connection the two following extracts are of interest:

"... There can be no doubt that the new policy (Old Age Pensions) will add to the incomes of families who feel the care of parents and grandparents a serious, even though not unwelcome, burden. The better provision for children that may result from this enlargement of family incomes should have a favorable effect on the rising generation."—Social Insurance by Henry Seager, New York, Macmillan Company, 1910, p. 143.

"Where pensions are to be distributed on a large scale without contributions from the participants, it is inevitable that they should be small. And such pensions go far to lift from the shoulders of old age its worst burden. The man with a sure income of two or three hundred dollars is on a very different basis of independence, even if he must live with children or relatives, from him who has no such support in his old age. Comfort and pleasure may be to a considerable degree out of his reach, but at least the wolf cannot enter the door."—Seventh Report of the Carnegie Foundation for the Advancement of Teaching, 1912, p. 64.

RETIREMENT OF PUBLIC EMPLOYEES

and would be more satisfactory to many employees. It could conceivably be used to advantage in the very athletic services and, as a retirement measure, it might prove feasible for large forces of unskilled laborers or other large bodies of low-paid employees, though its social expediency from the point of view of the general public might be questioned. For an ordinary service, however, it is impracticable because it would not lead to retirement without compulsion, and with compulsion it would make the service unpopular.

For Em-
ployee as
Head of
Family

The minimum of subsistence for the employee as head of a family is probably the cheapest scheme that would have a reasonable measure of success. It would doubtless promote thrift and, in a service made up largely of persons receiving low day wages or very small salaries, it might prove distinctly popular, because it would not involve a very large amount of sacrifice on retirement. In a force with a large number or a large proportion of more highly paid employees, it would doubtless be open to the objection that it would not be effective without a compulsory retirement provision, and such a provision would render the service unpopular. The more highly paid employees would regard dropping from their ordinary standard of life to a minimum of subsistence as a calamity little short of being reduced to absolute want.³³

³³ The argument against small retirement allowances was well stated in a Memorial for Conversion of Superannuation Assessments into a Provident Fund, British Parliamentary Papers, 1852-53, Vol. LVII, 666, p. 3, as follows:

"The scale of pensions awarded by the Act being so extremely limited and the consequent reduction of income on retirement so great, the small number of civil servants who may survive the prescribed age of retirement will be compelled from the pecuniary necessities of their position to cling to office to the last moment and to suffer themselves to be fairly worn out in the service, ere they will be induced to accept retirement and concede to their old age the consolation of repose. This tenacity to office must moreover have a prejudicial effect on the public service, since the object of a Pension Act, which is to provide a fitting retirement for the latter years of the faithful servant, to afford an opportunity of advancement to the zealous, as well as to the introduction of fresh and young powers into the official body, will be defeated."

SUPERANNUATION OR SERVICE BENEFIT

The Necessaries of the Standard of Life. The amount which would permit the family to have the necessities of its standard of life in those cases in which the employee has devoted his life to the service is probably the cheapest benefit which would be successful in a force with large numbers of salaried clerical and professional employees, such, for example, as the government departments at Washington. Such an allowance would not encourage retirement unduly, because retirement would involve, perhaps, the sacrifice of a good many things which would be classed as luxuries, unless the employee had saved to provide them for himself. On the other hand, the amount of sacrifice would not be so great that the administrative officer, realizing that the retirement of an employee was needed for the good of the service, would hesitate to act because of any feeling that his course was committing the family to comparative indigence. Such a provision would run the least chance of exciting popular disapproval. On the one hand, the faithful employees would not appear to their friends and acquaintances as having been made destitute, and on the other, unless they had private means, they could not excite comment by an extravagant mode of life.³⁴

The Absence of Sacrifice. The amount which would give the employee approximately what he had as an active em-

³⁴ The following argument advanced by the Departmental Committee on Superannuation of Teachers in Public Elementary Schools (British Parliamentary Papers, 1895, Vol. LXXVI, p. 10), is a common one and is frequently used in favor of a minimum of subsistence provision and the establishment of maximum limitations on pensions or contributions. It ignores the fact that small pensions will not induce retirements before the maximum age:

"Our chief objection to the proposal [to require additional contributions for amounts over and above a certain amount] is of a much more fundamental character. We think that the object of a system of superannuation for teachers should be limited to securing them against want on their retirement, and should make provision for this on the same basis alike for all teachers, whatever their salaries, without distinction. It seems most undesirable that the state should require teachers to invest savings from their salaries—beyond those requisite for obtaining the means of subsistence in old age—in the

RETIREMENT OF PUBLIC EMPLOYEES

ployee appeals sometimes to the thoughtless employee advocating a non-contributory system. It would not appeal to him under a contributory system, because his judgment would be sobered by the figures of cost. Such a provision would be enormously expensive. It fails, moreover, to consider the economic needs of the employee. Under a contributory system it takes more from him than he can spare when his children are young to provide more than he needs in his old age when his children are all practically economically independent, when his parents are generally no longer living, when his own needs and those of his wife are naturally simple and when he has all his own time to use as profitably as he may for his own advantage. Even if the government could afford to allow such a benefit on a non-contributory basis, it could better meet the requirements of the ordinary man by reducing the amount of pension and paying the resulting savings in the form of salary in the active years of life when a man is carrying his maximum load.³⁵ To offer men a chance to retire on an allowance almost as great as his working salary is, moreover, to put a premium on early retirement. It is unpopular with the public. It leads to the impression that the public employee has in his position a specie of "graft."

payment of additional premiums for the purpose of increasing their deferred life annuity. This would be to compel the adoption, to an unnecessary extent of a particular form of thrift, tending to prevent teachers in the receipt of good salaries from making due provision for their families. It seems desirable to leave them complete liberty to invest their surplus savings in any way they think proper."

³⁵ "There is at present a tendency of going too far in the matter of pension legislation for governmental and private employees, with the result that too large a proportion of the family's income is required for the present payment of future benefits, which may or may not be realized, as the case may be. Obviously, by making the contributions too high, as an aim for providing for a secure and comfortable old age, there is the danger that the present day efficiency of the contributors may be substantially curtailed. The successful solution of the problem lies in a conservative compromise between the extremes and a sympathetic understanding of the actual needs of the conditions when required to be met."—Frederick L. Hoffman in *International Actuarial Congress VII*, Amsterdam, 1912, Vol. 2, p. 516.

SUPERANNUATION OR SERVICE BENEFIT

In the minds of those who like to speculate about "the great analysis" it raises a question whether, if society has a sufficient production to permit such payments, it could not be more wisely expended in improved training for the rising generation than in providing more than the reasonable necessities of life for the generation that is passing. The man who wants luxuries in his old age should save for them in his youth independently, and should not demand that the compulsion involved in a retirement system be utilized to force all employees to provide them regardless of the demands that may be made upon them during the dependency of their children.

Changing General Terms into Concrete Figures. This discussion has been based on general terms, and the question may be asked what is the minimum of subsistence and what are the reasonable necessities of life. As general terms, they are fairly well understood. For years courts have enforced various laws requiring the application of the term "necessaries"; and "minimum of subsistence" carries its broad definition on its face. To translate them into actual figures requires a certain amount of study and investigation of the service to which they are to be applied. Any retirement allowance of more than two-thirds of final active salary would have an almost overwhelming presumption against it, except possibly in case of the lowest paid wage-earning class. An average retirement allowance of over half the final active salary would demand close scrutiny and be open to serious question, though under a contributory system; with full justice done the members who withdraw or who die, it would not necessarily be bad.

The whole question of the amount of benefit is one to be settled by compromise between the three parties to the system, the government, the employee, and the public. No one plan is perfect or is invariably to be preferred to every other. The object of this long discussion has been to indicate so far as possible the advantages and defects of the different ones. These merits and defects cannot be summarized, because they

RETIREMENT OF PUBLIC EMPLOYEES

are essentially matters of detail. Unless one is patient with detail, one can hardly hope to judge of the merits of a retirement scheme.

THE COST OF THE SUPERANNUATION BENEFIT

The Factors Determining Cost. The factors affecting the cost of the benefit for superannuated employees is the last broad division of the chapter on the superannuated benefit; and, unfortunately, it, too, is one involving a complex mass of details. It may perhaps be simplified by enumerating the forces that determine cost in a system that provides absolutely nothing—not even a return of contributions—in event of death in the active service, withdrawal from the active service for any cause whatsoever, or death soon after retiring on the pension rolls. In other words, the following are the factors determining cost in a system that provides nothing but a superannuation benefit terminating on the death of the employee:

1. The amount of the benefit.
2. The age at which retirement takes place.
3. The rate of withdrawal from the service by voluntary resignation.
4. The rate of withdrawal by dismissal.
5. The rate of withdrawal by sickness or accident making withdrawal imperative.
6. The rate of mortality among employees in the active service.
7. The rate of mortality among persons on the retirement rolls.
8. The rate of interest to be earned by the money if funded on a scientific actuarial reserve basis.

A suggestive arrangement of these forces is to classify them according to the extent to which they are within the control of the persons devising the system. The amount of the benefit and the age at which retirement takes place are variable ac-

SUPERANNUATION OR SERVICE BENEFIT

cording to the judgment of the makers of the system. The system adopted will influence the rate of withdrawal from the service by voluntary resignation, and the rate of withdrawal by dismissal. Practically speaking, the rate of mortality in the active force, the rate of accident and disease among active employees, the rate of mortality among retired employees, the rate of accident and disease compelling retirement, and the rate of interest are beyond control of the makers of the system, though in some services general health conditions could doubtless be improved.

Another significant list contains those factors that yield a profit to the superannuation fund in the event of a misfortune befalling a member. It contains death in the active service, illness or disease in the active service compelling withdrawal, dismissal from the active service, and death soon after passing to the pension rolls. Withdrawal from the active service by voluntary resignation is a profit to the fund under such a system and, of course, it may or may not be a disadvantage to the employee.

Any return of contributions or any benefit in the event of the happening of any of these profit-bringing misfortunes manifestly must increase the cost of the superannuation benefit.

Factors Causing Differences in Cost Between Different Employees. Under a system which provides (1) that all shall receive a uniform amount on retirement; (2) that all shall retire at the same age, and (3) that each employee is to contribute the cost of his own benefit scientifically determined on an actuarial reserve basis, the following factors will cause differences between employees in respect to the amount which they would have to pay as annual premiums to purchase their retirement:

The
Factors
Enumerated

1. Age at entrance into the service.
2. Sex.
3. Possibly occupation or service class.

RETIREMENT OF PUBLIC EMPLOYEES

The operation of these three factors should perhaps be briefly considered.

Age at
Entrance

If payments are made annually by each employee and are invested immediately at interest, the younger the employee is on entrance the more payments he will make, the longer they will remain at interest, and the more interest they will earn in the aggregate. It follows, therefore, that the younger the employee is on entrance, the smaller his contribution would have to be. If the entire cost were to be paid in one flat sum on entrance, the youngest entrant would pay the smallest sum because his payment would remain at interest longest. His chances of dying or withdrawing before reaching the age of retirement would also be greatest, because he would have more years in which to be exposed to these risks than the man entering at more advanced ages, and the chances of the fund being required to pay him a benefit would be the least. Unless a system having a uniform age of retirement charges the youngest entrant less for each dollar of benefit than the older entrant, the younger man is, therefore, paying part of the costs of the benefit for the older entrant.³⁶ If retirement is not based on age but on length of service, and if all employees are required to serve a uniform period and

³⁶ The following criticism of a system that does not vary the contribution in accordance with the age at entrance is typical:

"The superannuation list of many of the public departments (as in the case of the Customs) is at present burthened by individuals who have been improvidently appointed late in life, and who, *after a service of a few years only, having attained 60 years of age, become from that circumstance alone*, and not from the *value* of their past services, claimants upon the government. It would therefore be an injustice to the individuals who have given, or are giving up their whole time, from boyhood to old age, to make them pay for the impolicy of those who originally appointed men so far advanced in years, as to be from that circumstance, in a short time necessarily rendered inefficient. Whatever be the reward given in old age, to an individual who has devoted his whole life to the public service, it will have been honestly earned. The Government must therefore be accountable for the consequences of their own lack of foresight in appointing the evidently inefficient individual, and not call upon the useful clerk to remedy the error which they or their predecessors committed."—Observations on the Superannuation Fund Proposed to be

SUPERANNUATION OR SERVICE BENEFIT

then retire, the whole situation is changed, because the period during which the employees are required to make payments is the same for all and the period during which payments may draw interest is the same, but the length of time during which the employee may draw a retired allowance becomes very different. Under a system that required thirty-five years of service a retirement allowance for employees entering at forty or over would cost very little, because they would have to live to be seventy-five before they could receive a benefit, and their chances of living to seventy-five would be comparatively small. At the other extreme would be the young men entering at ages before 20 who would have to pay enormous premiums, because they could retire at or before fifty-five, their chances of reaching that age would be very great, and after their retirement they would, on the average, be in receipt of benefits for a long period of years. Under such a system, providing for a uniform period of service prior to retirement, the younger entrant would have to pay a larger premium than the older entrant, or else the older man would be paying for part of the retirement allowance of the younger man. If both age and service conditions are imposed, these two forces that have been described operate in opposition and the result is more of an approach to equality of cost as between entrants of different ages. Exactly what the costs would be would have to be determined by an actuary after a detailed study of all the facts involved.

The cost of a superannuation benefit for women employees is very different from the cost of an exactly similar benefit for men,³⁷ mainly on account of differences in the operation

Sex

Established in the Several Public Departments by the Treasury. Minute of 10 August, 1821, by Mr. John Groomes of the War Office, London, 1822, p. 26.

³⁷ For a table showing striking differences in cost of retirement benefits between men and women, see Report on the Pension Funds of the City of New York, Part II, by George B. Buck, p. 119. The figures contrast men school teachers and women school teachers. For the same benefits a man entering at age of 20 would have to pay 3.45 per cent of his salary, whereas a woman entering at that

RETIREMENT OF PUBLIC EMPLOYEES

of three important factors influencing cost—(1) withdrawal from the active service by voluntary resignation; (2) mortality both in the active service and among retired employees, and (3) unless a uniform compulsory age of retirement is provided without any option, retirement on superannuation benefit. Each of these forces deserves special consideration, since providing a difference in rates of contribution is sometimes cited as another instance of the unfairness of one sex to the other.

Differences
Between
Sexes: in
Withdrawal
Rates

Withdrawal because of voluntary resignation is generally much more frequent among women in the early years of service than among men, since most of the women employees are single when they enter the service and resign if they marry. Marriage, instead of tending to make a man resign, is almost universally recognized as tying him more tightly to his work. If, therefore, the system allows no benefit on voluntary resignation, the fund derives a larger profit from the early resignations of women employees than it does from the early resignations of men. In later life conditions influencing the withdrawals by voluntary resignation may be reversed, since the opportunities in fields outside the service are generally more numerous for men than for women, and hence more men may withdraw by voluntary resignation to accept them. If the ultimate profit from withdrawals by voluntary resignation is greater for women than for men, clearly the women should not be required to pay so high a premium for their benefits, and, of course, the reverse is true—that if the ultimate profit from withdrawals by voluntary resignation is greater for the men they should not be required to pay so high a premium as the women. In most systems a forfeiture of premiums or of all rights in event of the voluntary resignation of a woman employee on marriage has been recognized

age would have to pay 6.49 per cent. See also Actuary's Report to the London School Board, 1897, by Archibald Hewat, F.I.A., F.F.A., and Report of the London County Council on Superannuation of Teachers, November, 1910, p. 12.

SUPERANNUATION OR SERVICE BENEFIT

as contrary to a sound public policy, and consequently any unfairness to them on this score has been overcome in part at least by providing for them, sometimes as distinct exceptions to the rule, a benefit on withdrawal by voluntary resignation.

The mortality rate among men is generally higher than that among women at almost every age covered by a retirement system. In two ways this fact operates to make the rates for women higher than those for men. If the fund derives a profit from the death of an employee in the active service, this profit will be relatively greater in the case of the men, and hence for this reason the rates for women would be higher. Again, ordinarily, the women live longer than the men after retirement, consequently their superannuation benefits cost more, and this necessitates a further increase in the rates charged for them.

In
Mortality

If the superannuation system introduces a permissive minimum age of retirement and a higher compulsory age, or no compulsory age, the rates for women may have to be still further raised above those for men, since in all probability the women will retire at the younger ages, whereas the men will remain on until the compulsory age or until their health forces them to withdraw. The result will be that the women will make fewer payments into the fund and will receive more payments out of it.

In Super-
annuation
Retirement
Rates

Why women should retire on a superannuation benefit at an earlier age than men is an interesting question. Three explanations have been suggested—one, physiological, one, psychological, and, the third, economic. In some retirement systems earlier retirement ages are provided for women than for men in the belief that women employees wear out earlier than the men, although this earlier deterioration is not evidenced by a loss of vitality that raises the death rate for women above that for men at the ages involved. So far as one can judge from the evidence advanced at retirement hearings, the difference seems to be manifested in nervous

The Physio-
logical
Explanation

RETIREMENT OF PUBLIC EMPLOYEES

conditions, and the proposal has been made that before a woman employee be retired as superannuated at a comparatively early age because of nervous conditions she be granted a period of fairly extended leave at a rate of pay reduced to the amount of the retirement benefit, and on the expiration of this leave be granted a further trial in active service. The proposal involves granting such leave freely once to each woman employee who applies on the certified advice of her own physician. Properly safeguarded, the provision seems to have merit, but so far as is known it has not been specifically included in any system.

The Psychological Explanation

The psychological reason advanced is that women gainfully employed outside the home occasionally regard themselves as less fortunate than those who have a domestic life and consider having to do such work a hardship, and consequently as soon as necessity is removed by eligibility for a superannuation benefit they take advantage of the opportunity to retire to what they believe is a more normal, more suitable life for a woman. That not all women employees have this attitude is, of course, well known to anyone who has had experience in working with women, but its existence in even a small percentage of cases would be sufficient to influence the superannuation retirement rate.

The Economic Explanation

Economic differences between the sexes are undoubtedly an important factor in leading to the earlier retirement of women on superannuation benefits. The great majority of working women are single and their dependents are generally parents or brothers and sisters. Working men have dependents of these classes, too, and, in addition, they generally have children. As the working woman grows older her economic burden usually grows lighter rapidly, since her dependents are of her own or an earlier generation, or, if she be a widow, are reaching the period of self-support. A man's economic burden lasts fairly late in life because he has dependents of a later generation, and he can help them on in life so long as he is able to earn, and he can leave them anything that he

SUPERANNUATION OR SERVICE BENEFIT

has accumulated upon his death. Individual cases can, of course, be found to which these generalizations are entirely inapplicable, but the fact that they are true in a great number of cases probably explains in part why women feel that they can retire when men feel obliged to remain in harness.

Because of these differences between the sexes in respect to rates of voluntary resignation, rates of mortality, and rates of retirement on superannuation benefits, the superannuation system which is to be actuarially sound must keep the two sexes distinct if any considerable number of women are employed. If the system provides for a fair benefit in event of voluntary resignation, and possibly even if it does not, the rates of premium will have to be higher for the women than for the men for the same benefit, or if the rates are the same the men should get a larger benefit than the women. A variation in the rates is therefore an evidence of actuarial equity and not an evidence of sex injustice.

If the service to be included in the system embraces two or more distinct classes of employees who have very different occupations and who presumably live under very different economic and social conditions, it is rarely safe to include all in one great group with a single rate applicable to all. The factors that determine cost may very easily be entirely different for each class. Even death rates differ. School teachers in New York, for example, have a much lower death rate than the street cleaners,³⁸ and it would be entirely unfair to include the two under a single system, having uniform benefits and uniform premium rates. To include two separate services properly correlated under a single administrative agency would not be prohibited; it would, on the contrary, be in every way desirable; but to include widely different services within a single system would not only lead to unfairness, but it would make it generally difficult to adjust the

Occupation

³⁸ See Report on the Pension Funds of the City of New York, Part II, by George B. Buck, New York, 1916, p. 376.

RETIREMENT OF PUBLIC EMPLOYEES

system to the real needs of the two services and to the two classes of employees.

The superannuation benefit should be the corner stone of the retirement system and great thought has to be given to the conditions upon which it shall be granted, the amount that shall be granted, and the cost. Broad-sweeping generalizations cannot be drawn from the perhaps too detailed discussion of the present chapter. One possibly can be ventured. The ideal superannuation system is the one specially designed to meet the particular needs of the particular service with full knowledge of the merits and defects of the various possible devices and expedients.³⁹

³⁹ "There is a natural tendency to devise simple rules that on the whole will seem to work well; but complex conditions can generally be served only by equally complex provisions, and like the rates of contributions general rules, however they may serve the large majority of cases, are apt to cause considerable inconvenience in the numerous cases that deviate from the normal."—Eighth Annual Report of the Carnegie Foundation for the Advancement of Teaching, New York, 1913, p. 51.

CHAPTER VI

THE DISABILITY BENEFIT

Definition. The Objects Sought in Establishing a Benefit. The Danger of Fraud. Safeguards. The Conditions Upon Which Granted. The Nature and Extent of the Disability. Length of Service Required. The Amount of the Disability Benefit. Three Divisions of Subject. Amount of the Disability Benefit and the Amount of Salary. The Benefits Independent of Salary. Disability Benefits Directly Dependent Upon Salary. Disability Benefits Indirectly Dependent on Salary. Correlating Superannuation Benefit and Disability Benefit. The Amount of Benefit and the Length of Service. The Amount of Benefit and the Social and Economic Needs of the Employee. Four Classes Considered. The Cost of the Benefit. The General Factors Determining Cost. The Differences in Cost for Different Classes of Employees. The Contributory vs. Non-Contributory System for Disability Insurance. Distinction in Applicability Between Disability and Superannuation. Disability in the Actual Performance of Duties. The Provision of a Special Benefit. Benefit Non-Contributory. The Amount of the Benefit. Correlation With Other Benefits. No Return in Event of Withdrawal.

DEFINITION

A disability benefit in a retirement system is an allowance paid to an employee who, through accident or disease, is rendered unfit for further service before he has fulfilled the age or service conditions permitting retirement on a superannuation benefit. Its distinctive characteristics are two: It is granted solely on the ground of accident or disease, and it is paid to an employee in the early years of life.

In theory the cases of disability covered can be divided into two distinct classes: (1) those in which the accident or disease is the direct result of the actual performance of duty; and (2) those in which the accident or disease results from other causes. Persons familiar with workmen's compensation laws will at once recognize that the disability benefit

RETIREMENT OF PUBLIC EMPLOYEES

of a retirement system covers far more than the award under a compensation law, in that it extends to accidents and diseases not remotely caused by the actual performance of duty, whereas compensation laws in this country do not yet generally recognize occupational diseases, not to mention ordinary disabilities. Governmental retirement systems, in fact, have not developed as substitutes for employers' liability, as have workmen's compensation laws; they have been developed more largely in services in which industrial accidents and occupational diseases are probably comparatively rare, in which the positions are more permanent, and in which, therefore, any disability, however caused, gives rise to administrative problems, the solution of which seemed to demand a disability retirement benefit. In the present chapter the principal discussion of the disability benefit relates to disability not directly attributable to the actual performance of duty. At the end of the chapter some attention is given to differences in principle, which would seem to arise in case the accident or disease was due to the performance of duty.

THE OBJECTS SOUGHT IN ESTABLISHING A BENEFIT

The objects sought by the parties to a retirement system in establishing such a benefit have been considered in detail in Chapter I. They may be briefly summarized as follows: The government desires to improve its staff (1) by eliminating the disabled, who, in the absence of a retirement system with a disability benefit, are continued on its active rolls at full pay, because administrative officers are unwilling to dismiss them to possible poverty; (2) by improving the morale of the remaining force by removing the excusably slow and inefficient, who may become pace-makers and excuses for the inefficient without excuse; (3) by retaining in the service some of the promising men who now resign, by insuring them against the dangers of accident and disease and (4) by attracting to the service a higher type of men by promising them sound insurance against these dangers. Another object which

THE DISABILITY BENEFIT

the government might conceivably attempt to achieve through the establishment of such a benefit is to improve the general healthfulness of its employees as a class, by providing a humane procedure through which employees suffering from tuberculosis or other communicable disease could be retired, although still perfectly able to perform the duties of their office satisfactorily. In the absence of any retirement provision, the thoroughly efficient employee who contracts tuberculosis after entering the public service constitutes a baffling problem for the administrator. To continue him in the service may expose his fellow employees, whereas to dismiss him without adequate provision for his maintenance and that of his family is to add arbitrarily to his misfortune. Through an adequate disability retirement provision, the employee who is suffering from such a disease would be furnished the leisure and, to a certain extent, the means to secure proper treatment and the other employees would be freed from such danger as exposure constitutes. Such a use of the disability benefit might prove a constructive public health measure, and possibly might result in the long run not in increasing the cost of the disability benefit, but in reducing it.

Possible
Provision
for
Tubercular
Employees

From the point of view of the employee, a disability benefit is undoubtedly an attractive feature of a retirement system, because it gives him what he cannot get adequately in any other way—life protection against permanent disability from accident or disease. Against old age he can provide independently by saving; against death he can insure with a private insurance company; against temporary loss due to sickness, or accident, he can also insure; but it is very difficult and costly to get adequate protection against the accident or disease that permanently destroys his earning capacity but does not kill him.¹

¹ The following argument advanced by the United States Commissary General is perhaps worthy of note:

“ . . . In cases of protracted illness, employees worry over the possibility of being discharged, and the anxiety tends to retard their

RETIREMENT OF PUBLIC EMPLOYEES

To the public a disability benefit in a retirement system is a distinct asset. It improves the quality of the public service; it prevents the disabled employee from becoming a public charge or a dependent on private charity, and it increases the proportion of the population which is able to afford adequate medical care and attention in case of accident and disease.

THE DANGER OF FRAUD

The opportunity for fraud is the great fundamental danger inherent in disability benefits. This danger has in the past tended to prevent private insurance companies, which, of course, have no administrative control over their policyholders, from covering disability adequately. A disability benefit is peculiarly susceptible to fraud for two general reasons: it puts a premium on dishonesty, and no perfect device for detecting fraudulent claims has been devised.

Four
Distinct
Classes
Tempted

The premium on dishonesty is offered to at least four distinct classes. By no means all the employees in any one of these classes will succumb to the temptation thus created; without question the great majority of public servants have high standards of honesty and would not abuse the privileges which the system affords, but public servants are not an aggregation of perfect mortals; among them is a minority which will not only seek to take advantage of the system, but will in many cases succeed, for such seems to be the invariable history of disability benefits. The first of the four classes contains the employees who dislike to work and who find a temptation to magnify every accident or a disease into an excuse for retiring. The second class consists of those who desire to leave the service to enter some other occupation and who would find a regular payment of a disability allowance

recovery and return, whereas, if they were free from this apprehension and felt secure of being provided for in the event of becoming incapacitated their strength and courage would be sustained and recovery assisted rather than impeded."—27th Report of the United States, Civil Service Commission, 1911, p. 142.

THE DISABILITY BENEFIT

a sort of crutch on which to lean at least until the new venture had proved itself. The third class is almost the same as the second; it contains the women who are planning to leave the service to marry. The last class includes the administrators who desire for one reason or another to secure vacancies in positions to which they have power to appoint, legally or practically. All four of these classes have become well-recognized problems in disability retirement systems.

Against these four classes the system can to a very great extent be safeguarded, but it cannot be absolutely proofed. Many of the facts necessary for an honest and efficient administration of such a benefit are known only to the employee, and he may either not reveal them or deliberately falsify regarding them. He can easily make his retirement on a disability benefit appear to his administrative superiors as a consummation devoutly to be wished. Safeguards have, therefore, to be developed to a maximum in the legislation establishing the system.

Safeguards. Safeguards may be introduced in three principal ways: (1) by providing for medical examinations; (2) by making the system no more conducive to retirement than is absolutely essential, and (3) possibly by providing some direct connection between the number of disability retirements and the premiums charged the employees.²

Methods

In providing for a medical examination, the legislature establishing the system has to consider two principal questions, the time or times at which the examinations shall be made and the selection of the physician or physicians to make them. The primitive device in respect to time is to have only one examination, made when the application is first considered. Under such a system, some employee retired as totally

Medical
Examina-
tions: Time
at Which
Made

² William Sutton recommended that the disability provision be made by the establishment of a separate fund, at first on the assessment basis. See report of Committee on Teachers Superannuation, British Parliamentary Papers, 1892, Vol. XII, p. 173.

RETIREMENT OF PUBLIC EMPLOYEES

and permanently disabled will be found in a few years occupying a responsible position in some other field. To prevent this abuse, the law may require: (1) that examinations shall be made periodically; or (2) that no grant shall be made in the first instance for a period longer than a given number of years (three, for example) and that at the end of that period the entire case shall be reexamined and final action taken, or (3) that the retired employee may be reexamined at any time in the discretion of the administrators of the retirement system. If, at any subsequent examination, the disability is found to have passed, the employee is required to return to active duty or to give up his allowance. Forfeiture of allowance, without the privilege of returning to the service, may be made a penalty if the employee was guilty of any fraudulent conduct.

Selection of Physicians

The selection of the physician or physicians is a highly important matter. The Webbs in their "Prevention of Destitution," discussing a closely related matter of sickness insurance, say, "To require only the production of a medical certificate from the patient's own doctor is a direct inducement to the patient to go to the doctor who will grant certificates most easily and a standing temptation to the doctors to emulate each other in this laxness."³ It is probably not unfair to the medical profession to say that if an employee has made up his mind to retire, he can find some doctor, legally qualified to practice, who will certify him as unfit, if he can produce color of evidence. The tendency is, therefore, away from permitting a man to retire solely on the medical evidence of his own physician. Physicians selected by the administrative officer for whom the employee works are likely to adopt as their definition of fitness the same definition used by the administrator. Too frequently the chief aim of the administrator is to avoid an embarrassing problem in personal relations by

³ "The Prevention of Destitution," by Sidney and Beatrice Webb, Longmans, Greene & Co., London, (1911), p. 187.

THE DISABILITY BENEFIT

getting the difficult person declared disabled. Such a procedure is far simpler than preferring charges against him and having him dismissed, or, if the situation does not warrant that course, than working out the necessary adjustments. Administrators apparently can rarely be made to appreciate the cost of this method of avoiding distasteful duties. The ideal practice probably is to have the examination made by physicians selected by the administrators of the retirement fund, and to permit other physicians to testify before these retirement fund physicians, but as witnesses only. In this way, some uniformity of practice is maintained and the administrators of the retirement system, by watching their statistics, can detect any administrative tendency toward a general unloading on the system.

The fact that a rigid medical examination is required, with prescribed or possible reexaminations in the future, is in itself a factor that tends to prevent the system from being overconductive to retirement, but by itself such a provision is hardly sufficient. Even with a strict medical examination, repeated at intervals, it is doubtful if the system could meet the strain that would be put upon it by offering large benefits. The benefits must be small, not only because they are expensive, but because, if they are large, they will offer too great a temptation to "beat the system." The attractiveness and the danger of such benefits can be still further reduced by increasing the uncertainty of their payment. Provision may be specifically included that the benefit must cease on the marriage of a woman employee retired as disabled, or in the event that any employee retired as disabled is engaged in an occupation which is inconsistent with disability. Probationary grants and periodical renewals are devices that operate in the same way. In the Irish Union scheme, the device was tried of making the whole allowance discretionary and of requiring the employee to resign before any action was taken regarding a pension. In that system, at the time, no superannuation benefit was granted as a right; and the discretionary

Diminishing
Attractive-
ness of
Benefits

RETIREMENT OF PUBLIC EMPLOYEES

disability scheme did not work at all well; ⁴ but it is a possible device, which might be successful in conjunction with a fair superannuation system, though it would perhaps give too much discretion to the administrators and might not produce retirements in cases where retirement is absolutely necessary for the good of the service. A more promising suggestion is that the right of applying for the retirement of an employee on a disability benefit be vested solely in the administrative officer directly responsible for the work of the employee and that no employee be allowed formally to initiate proceedings to declare himself disabled. The theory of this proposal is that so long as the responsible officer is satisfied with an employee, there is no reason for his retirement.

Placing
Part of
Financial
Burden on
Employees

If some financial burden is placed upon the employees that will increase in the event that the disability benefit is abused and if some democracy of administration is provided, the great body of employees will have an incentive and a way to prevent fraudulent retirement and to correct the innocent mistakes made in predicting the extent and probable duration of disability. In social insurance legislation, the principle is generally recognized that sickness benefits must be locally administered so that the corrective force of public opinion is brought to bear. The public opinion of fellow employees could undoubtedly be made a wholesome force in protecting the disability benefits of a retirement system from being abused if this public opinion can be kept interested and informed.

Safeguards
a Protection
to Honest
Employees

To the honest employee these restrictions and safeguards may appear on first thought distasteful and possibly humiliating, but they are in reality in his own interest. A fraudulent disability retirement, even if only a small benefit is paid, is an enormous drain on the resources of the fund. The employee who has succeeded in fooling the administrators of

⁴ Report from the Select Committee on Union Officers Superannuation (Ireland) Bill, British Parliamentary Papers (1882), Vol. XIII, p. 3.

THE DISABILITY BENEFIT

the system has made comparatively few payments into the fund or has occasioned only few payments on his behalf; but he will, on the average, draw many payments out, because he has retired at a comparatively early age and, since he is not genuinely disabled, his expectation of life has not been materially reduced. In some instances, indeed, the expectation of life of employees retired because of disability has been found to be greater at many ages than the expectation of life of persons retired because of superannuation, proving that the vitality of the persons retired as disabled has not been impaired.⁵ The cost of these payments during the possibly long life of the fraudulent beneficiary are borne directly or indirectly by the honest employees. Satisfactory benefits for disability occurring in early life cannot possibly be provided out of a man's own contributions because they are entirely insufficient. The benefit must be provided on an insurance basis, the fortunate who are not disabled bearing the burden for the unfortunates who are. Under a wholly contributory system, the cost of fraud, therefore, falls directly and obviously on the honest employee. Under a non-contributory system, the incidence is less direct, less obvious, but the general trend of economic forces is to put it in the same place. In no way can the financial cost be shifted to the successful perpetrator of the fraud. The great body of honest employees must recognize not only that they pay for fraudulent retirement, but that conspicuous cases of successful fraud may rouse popular resentment against the system and against the employees as a class. Two or three exceptional cases can easily be used by a clever speaker to produce the impression that the entire body of public servants is corrupt and the employees will be unable to deny the facts relating to the strik-

⁵ For an instance see Report on the Pension Funds of the City of New York, Part II, by George B. Buck, New York, 1916, p. 58, where it is shown that in the Police Pension Fund the expectation of life of the disability pensioners was greater than that of the service pensioners at all ages for which figures are available, namely from 55 to 95.

RETIREMENT OF PUBLIC EMPLOYEES

ing exceptional cases. Facts regarding the great body of everyday, steady, faithful and honest employees are practically never striking or picturesque. They furnish no talking point. The employees to protect their own interests should, therefore, seek to strengthen any device which will prevent fraud yet not restrict retirement in meritorious cases.

THE CONDITIONS UPON WHICH GRANTED

The conditions upon which a disability benefit shall be granted may conveniently be considered under two heads: (1) the nature and the extent of the disability warranting retirement and (2) the duration of the service required before the right to an allowance in the event of disability accrues.

The Nature and Extent of the Disability. The nature and extent of disability may conveniently be considered from three different points of view. From the point of view of its duration, it may be classified as temporary or permanent; from that of its completeness, as total or partial; and from that of its character, as physical, mental or what may be termed moral. Partial disability may be subdivided according to whether the disability disqualifies the employee for all work done by the employing government or only for certain branches of it. The three main aspects will be taken up in turn.

Leave Reg-
ulations
Cover
Temporary
Disability

Temporary disability could conceivably be provided for in the retirement system by including benefits in the nature of insurance against temporary absences due to sickness and accident; but, in foreign countries, temporary disability from sickness and accident have generally been covered in the regulations governing leave of absence.⁶ Provision through leave

⁶ When the English system of general health insurance was introduced in 1911, the question naturally arose as to whether the employees of the crown should be included in the system or whether, where necessary, their privileges of sick leave should be so extended

THE DISABILITY BENEFIT

regulations seems, in fact, the more desirable procedure because it is simple and leaves the administrative responsibility in the hands of the employee's immediate superior, who can act on first-hand information, whereas, under an insurance system, control would have to be more highly centralized and everything would be much more complex. Adequate provision for temporary disability through the leave regulations would, however, in many cases require their revision to permit of longer absence on active pay, to safeguard the increased privileges against abuse, and possibly to provide some appropriation system whereby the position of the absent employee might be filled temporarily by a substitute.

Suggestions regarding methods of safeguarding a privilege of extended sick leave are of manifest importance. Federal authorities at Washington grant practically as a right thirty days a year of "annual" or vacation leave and if necessary thirty days of sick leave. Absences on sick leave for more than a day or two generally have to be supported by a certificate from the employee's physician. Though the requirement of a physician's certificate may prevent some abuse, it by no means prevents it entirely. Almost every federal office has its more or less notorious though exceptional cases of employees who are regularly sick thirty days each year, though surprisingly well after all their sick leave has been exhausted.⁷ Of one federal employee who lived on a farm

Protecting
Sick Leave
from Abuse

Medical Ex-
aminations

as to bring them outside the act on the ground that they were otherwise sufficiently protected. The general decision was in favor of retaining the sick leave provisions with such extensions as were necessary except in certain of the services where wage workers were employed at regular trade union rates. See First Report of an Inter-Departmental Committee on Employment under the Crown as affected by Part I of the National Insurance Act, 1911. British Parliamentary Papers, 1912. (cd. 6234.)

⁷ The abuse of the privilege of sick leave is by no means general in the Federal service. Cases such as that cited are exceptional. The Committee on Departmental Methods in its report to the President dated December 24, 1906, showed that the average number of days sick leave per employee was 7.04 and the average number of days annual leave was 26.03, which give a total of 33.07.

RETIREMENT OF PUBLIC EMPLOYEES

outside of Washington it used to be said, "He plants on 'annual' and harvests on 'sick.'" Yet it was said he could always produce the required physician's certificate when the harvest was in. The employment of a medical visitor paid by the government is the practice in some places. The London City police, according to the testimony given some years ago, had marked success in dealing with the problem of sickness by maintaining their own hospital, to which were sent all employees who were not fit for duty. A man was either on duty or in the hospital or at some place to which he had been sent to recuperate by the hospital authorities. It is significant that the sickness rate was lower for the City of London police than for the police of the Metropolitan District of London, who had no special hospital, but were attended in their own homes by police physicians. This difference was attributed in part to the fact that better care and diet could be provided in the hospital than the men could secure in their own homes and in part to the fact that even if the physician in attendance is retained by the employer and not by the employee there is some malingering.⁸ Undoubtedly the hospital device is the extreme to which medical examination can be carried, and it might not prove feasible for many services, although it has its distinct merits, especially in large forces of single men or of men on wages or small salaries.

Other Devices

Devices for protecting sick leave privileges from abuses that are not dependent on medical examination have been introduced under different systems. Reducing the amount of salary after a certain preliminary period is a common one, but is open to the objection that it may deprive a man of some of the very things he needs to restore him to productivity. Another device is to make the amount of sick leave with full pay discretionary, but to require that the names of

⁸ See Testimony of Sir James Fraser, Commissioner of City Police in Report from the Select Committee on the City of London Police (Pension Bill), British Parliamentary Sessional Papers, 1889, Vol. 9, pp. 9, 11.

THE DISABILITY BENEFIT

all employees who have had more than a certain amount shall be reported publicly each year to the appropriating body with a full statement of the facts in each case. A device tried at one time with marked success by the Kensington Museum of England has some especially good features.⁹ Under this system, each employee is granted a certain number of days sick leave each year, say ten, but, if he does not require it all in any one year, the unused balance is permitted to accumulate. If an employee should enter the service and escape any illness for ten years, and should then be ill, he would be entitled to one hundred working days of absence with full pay if that much were required. If a larger amount, say 30 days, were granted on appointment as an initial reserve and, if after 3 years this were added to at the rate of ten days a year cumulative, cases in which leave without pay became necessary because of sickness would be greatly diminished, especially if all employees before appointment were given a thorough medical examination, as is done in England. The principal merit of the cumulative device is that it gives all employees an incentive to be saving of sick leave. It tends, moreover, toward equality of treatment for all employees. Under the present system of the Federal government, the employee who has served nine years without any illness and is seriously ill in his tenth year gets in that year thirty days' sick leave or an average of three days a year for his ten years of service, whereas the extreme malingerer of ten years' service has had three hundred days or an average of thirty a year. By a careful statistical examination of the sickness records

⁹ See "Science and Art Department Superannuation," British Parliamentary Papers, 1888, Vol. LXXVIII, p. 15.

The Committee on Departmental Methods, on Dec. 24, 1906, submitted to the President a report on the subject of annual leave, sick leave and hours of labor in the Federal Government. It recommended the granting of ten days a year sick leave cumulative with a proviso that not more than thirty days could be taken in any one year. The purpose of the committee was evidently to prevent the abuses that had arisen under the thirty-day provision and not to establish a device to care for the employee in case of temporary disability.

RETIREMENT OF PUBLIC EMPLOYEES

of a service, it would doubtless be possible to devise a cumulative system, supported by medical inspections made by physicians selected by the government, that would provide for the vast majority of cases of temporary disability. Provision for exceptional cases might be made by vesting discretionary powers in certain high administrative officers and safeguarding them by requiring publication of the names of employees to whom special sick leave had been granted with all the facts in the case including the certificates of attending physicians. Cases of temporary disability could then be handled under the sick leave regulations.

Disability
for All
Classes of
Government
Work

Unless the disability is permanent and is such that it unfits the employee not only for his own particular task but also for all other work which the government has to do, it is very questionable whether a sound public policy would justify his retirement. The destruction of the productive power of society that results from accident or disease clearly must be reduced to a minimum. If a man's productive power is crippled but not destroyed, the object of society should be to utilize what power remains to best advantage, and, if the government has a position of a lower grade which it can give the employee, in which he can utilize his earning power, the solution would seem to be to give it to him. Against such a solution, the argument is advanced that the reduction in position will injure the employee's pride. In so far as fear of injuring an employee's pride after he has been disabled would result in his retention in a position which he is no longer fitted to fill, the objection is well taken. As a mere sentimental objection, it raises this question: How far should the employees as a class be compelled to insure directly or indirectly against an injury to that kind of pride which will permit them to take a retirement allowance at the expense of their fellow employees in preference to a position which their abilities will permit them to fill? Undoubtedly if the accident or disease is the direct outcome of the employee's occupation, the government owes him a benefit which will offset the loss be-

THE DISABILITY BENEFIT

tween his earning power before the misfortune and his earning power after it, but if it is not the direct outcome of his work, and if the government can give him a new position suited to his condition, that in itself is a large provision.

If the employee is partially disabled and is unfitted for any work which the government can give him, he would have to be allowed a disability benefit under the system or the chances are that he would be retained in the active service if he were still able to keep up appearances of normal activity. If dismissed, he would be handicapped in his efforts to secure even that work which he is fitted to do. The system should not, however, prohibit him from engaging in work within his powers, and, if possible, the amount of the benefit should be such as to induce the employee to undertake some new activity. This question of amount of the benefit will be considered more at length in the section devoted to that subject.

To distinguish between the physical and mental disability and the moral disability which results from laziness, loss of interest, dissatisfaction, dissipation or deliberate intention is doubtless one of the most difficult problems that arises in the administration of a retirement system. The disability considered under the head of a disability benefit is, theoretically, disability resulting from some disease or accident which so affects the employee physically or mentally that he is no longer capable of the efficient performance of his duties while maintaining proper personal relation with his fellow employees. The first evidence of disability whether physical, mental or moral is either failure to be present at work with a reasonable degree of regularity, or, if present, failure to perform the immediate duties efficiently or to preserve proper personal relations. The first condition to a grant of a disability allowance would seem to be, therefore, that the administration authority, under whom the person involved works, shall certify that he believes, after a detailed investigation, the results of which are submitted in writing, that the person is physically or mentally incapacitated. Such a report might or might not

Mental or
Physical
Disability
Distinguished
from Moral
Disability

Suggested
Procedure

RETIREMENT OF PUBLIC EMPLOYEES

include medical evidence and to safeguard the interests of the employee a copy of the papers should be submitted to him, or, if he is not in condition to receive them, to his physician or other representative. He or his representatives should be permitted to file any answers that are in the employee's interest and then the papers should go to the appointing officer or other suitable officer through the regular line of authority for review and approval. The second condition to the grant would seem to be a decision from an independent medical authority, selected by the officers administering the retirement system, after examination of the person of the employee and such other evidence as may appear necessary to them, (1) that the employee is disabled from a physical or mental condition resulting from accident or disease; (2) that in their opinion the disability is permanent and cannot be overcome by a grant of any legal sick leave and (3) that the disability is total, or if only partial that it unfits the employee for all branches of the service under the government. If the medical referees should report that the employee was disabled for his particular task, but not for all work under the government, it would become the duty of the officers in charge of the retirement system to place the employee in the first suitable vacancy resulting under the retirement system. All retirements obviously will be known to the officers of the retirement system, and under a proper scheme of organization they will be in close touch with the civil service commission or other selecting machinery.¹⁰

¹⁰ The recommendations of the Departmental Committee on Superannuation of Teachers in Public Elementary Schools (British Parliamentary Papers, 1895, Vol. LXXVI, p. 18) were as follows:

"The application [for disability pension] should in the first place be accompanied by a certificate from a medical man recognized by the regulations stating that the applicant having been examined for the purpose was, at the date of the certificate, incapable, by reason of physical or mental infirmity, of continuing to teach efficiently in a school, and that the incapacity was likely to be permanent. If necessary, a second medical certificate should be required.

It would be advisable not to grant the pension, in the first place, for

THE DISABILITY BENEFIT

If the disability benefit provision is to be utilized to permit the retirement of persons suffering from tuberculosis, the administrative officer should be authorized to recommend retirement on that ground regardless of the employee's efficiency. If, however, all persons are subjected to a rigid medical examination upon appointment, and, if extended sick leave can be granted, it would hardly seem as if many cases of tuberculosis would develop to a stage demanding permanent retirement.

Tuberculosis

Length of Service Required. How long an employee should be required to serve before becoming entitled to a disability benefit in the event of incapacity resulting from accident or disease is an important question of public policy. Under the earlier conception of a retirement system, as a reward for long and faithful service, the position was frequently taken that the employee really did not become entitled to any benefit

The
Problems
Involved

a longer period than a year, and then to require another medical certificate of permanent disability.

A report from the Inspector and from the Managers of the school where the applicant has been employed should be obtained when the application is considered.

Power should be taken to withhold, suspend or reduce the pension, if the position of the applicant, or if the pensioner at any time, appears to warrant it. Thus a teacher incapacitated from teaching in a school, but able to earn an adequate livelihood in other ways, might be refused any pension so long as such ability continued. But we do not recommend that such power should be exercised if the medical evidence shows clearly that the disability has arisen from the exercise of the duties of a teacher.

Periodical revision of the position of the pensioner would be necessary, say, every three years.

It will also be necessary to provide that no such pension shall be granted to a clearly undeserving person. Thus, the pension should be refused if the disability on the ground of which it is claimed, is caused by circumstances for which the teacher is clearly responsible. Again in the event of the pensioner being convicted of crime the pension should be forfeited.

Further, the pension should, we think, lapse upon marriage taking place after the first award of the pension.

As an additional protection a satisfactory medical certificate should in future be required of every teacher before obtaining recognition as a certificated teacher. Such medical certificates are already required of teachers who pass through training colleges."

RETIREMENT OF PUBLIC EMPLOYEES

until he had been in the service for a considerable period.

The government, according to such a theory, was justified in measuring the degree of its responsibility for caring for its disabled employees by the length of time they had served it. If an employee was so unfortunate as to be disabled after he had served but a few years, he was rightly left to shift for himself, or to become a dependent on charity, because short service did not create any obligation for charitable consideration or for special reward from the government. Under the more modern conception of retirement benefits as forming parts of the compensation for services rendered, paid in this form for the common advantage of the government, the employees and the public, the establishment of a minimum service requirement is far less defensible, especially if the disability benefit is arranged as a system of mutual insurance.

Clearly, if disability is caused by an accident or disease directly due to the actual performance of duty, the government would now be regarded as under moral obligation, if not under legal obligation, to make provision in some suitable form regardless of the time the employee has been in the service. The distinction between accidents and diseases occasioned by the actual performance of duty is easy to make in thought but difficult to make in practice.¹¹ The argument may easily be advanced that the accident or disease due to the actual performance of duty, although not sufficient in itself to cause disability, was the initial force producing a chain of events culminating in disability. A minor accident, for example, may be regarded as having produced a nervous shock, which resulted in a complete nervous breakdown or a minor illness due to some condition of employment, may be stated to have hastened the onset of a degenerative disease. Because of this difficulty in determining whether disability is the direct result of an accident or a disease incurred in the performance of

¹¹ For a medical work giving details regarding the difficulties involved see "Malingering and Feigned Sickness," by Sir John Collie, M.D. Edward Arnold, London, 1913.

THE DISABILITY BENEFIT

duty, a distinction of this kind is difficult to administer. If an employee with a dependent wife and children is totally disabled say by an accident and can get an allowance in case the accident occurred in his line of duty, but if not will be denied it on the ground that he has not served the minimum number of years, he will get the allowance if he can show color of evidence, because everyone will want him to get it and no man will have the incentive to be highly critical. The wisdom of establishing a minimum period of service as a prerequisite to eligibility is, therefore, perhaps somewhat questionable.

The interests of society as a whole are undoubtedly that provision for genuine disability shall be made in a reasonable amount regardless of the length of time the man may have been in the service. The fact that the disabled employee may have served only a few months does not lessen his need nor the need of his children. An adequate system of insurance provides for such cases systematically, whereas, in the absence of a system, the employee and his family may become dependent on public or private charity.

The employees themselves under a contributory system would almost certainly prefer to pay a little more and secure protection from the outset than to save a little on the premiums and have no protection against disability in the earliest years.

Rigid medical examination of all applicants with the rejection of all who are not in sound health is, of course, a prerequisite in a system that insures against disability from the outset, if the system is to be protected against the obvious dangers of such a provision.¹² A thorough medical examination made by the physicians employed by the system¹³ would

Medical
Examination
on Entrance

¹² For many positions in the Federal Civil Service a medical examination is already required and this is also true of many municipal services, such as fire and police.

¹³ In the Federal Service examinations could be conducted by the surgeons of the Public Health Service. That service could make the data thereby secured of value in promoting public health. Periodical examination of all employees by the Health Service might prove desirable.

RETIREMENT OF PUBLIC EMPLOYEES

operate in many respects as a minimum service condition. The employees admitted would be what an insurance man might term "select risks," because all those apparently liable to be retired early would have been eliminated. In life insurance the selection through medical examination is regarded as exerting an influence, of course in a constantly diminishing degree, for five years, after which its effect is gone.

Additional elements of protection could be secured through increasing the amount of benefit somewhat with length of service, that is, by granting only a very small amount in the first few years of service. This subject belongs more properly, however, in the following section on the amount of benefit.

THE AMOUNT OF THE DISABILITY BENEFIT

Three Divisions of Subject. The question of the amount of the disability benefit may be considered under the same three general headings that were used in discussing the amount of the superannuation benefit, namely, (1) its relationship to the amount of salary or wages; (2) its relationship to length of service, and (3) its relationship to the social and economic needs of the employee. The principles that govern the two benefits are, of course, in many respects identical; and the present discussion will, therefore, not go into details regarding the common points considered in the chapter on the superannuation benefit, but will be devoted mainly to those features which are peculiar to the disability system.

THE AMOUNT OF THE DISABILITY BENEFIT AND THE AMOUNT OF SALARY

In their relationship to salary, as was pointed out in the preceding chapter, benefits may be: (1) entirely independent of salary; (2) directly dependent on salary; or (3) indirectly dependent on salary. In dealing with disability benefits a combination of two or more of the preceding types may become of importance,

THE DISABILITY BENEFIT

The Benefits Independent of Salary. Disability benefits entirely independent of salary might conceivably be of four kinds: (1) a discretionary amount; (2) a fixed sum; (3) the annuity which the accumulation from a fixed annual payment will purchase; or (4) the amount of disability insurance which a fixed annual premium will purchase.

The discretionary amount in the event of disability must, of course, be considered as protected by a maximum limitation above which no grants could be made under any circumstances whatever. Thus protected, its merits and defects would probably depend on the character of the force to which it was applied and the character of the administration. In a force in which political activity is rife and the administration open to influence, a maximum grant would probably become the rule, but exceptions might be made on grounds other than the good of the service. In an ably administered force little affected by influence, the system might be argued to have certain advantages, because it would permit the gradual development through experience of a code of administrative rules that would insure practical equality of treatment of all employees under like circumstances and at the same time allow certain important factors in the case to be taken into consideration. Among these factors may be enumerated the nature and extent of the impairment of earning capacity and the extent of the family obligations of the employee. Such a provision might tend, moreover, to introduce an element of uncertainty into the grant and might thereby diminish the temptation to make fraudulent applications.

Among the employees, however, such a system would probably prove highly unpopular. They would want to know the exact amount they would receive under given circumstances, and even under the wisest and fairest administration differences of judgment would almost certainly arise as to the relative merits of different cases. Although, under a contributory system, or possibly even under a non-contributory system, this objection could be overcome in part by having the em-

The Dis-
cretionary
Amount

RETIREMENT OF PUBLIC EMPLOYEES

ployees represented in the administration, it is doubtful if even this arrangement would be so popular as fixed rules to be administered without discretion.

A further objection to the discretionary amount is that it introduces an element of financial or actuarial instability into the fund. One political administration might be much more generous than any of its predecessors and the liabilities incurred thereby might become far more than the assets that have been provided to meet them. If the scheme has been safeguarded to a maximum extent against improper retirements and, if a political administration could not make more retirements than its predecessors, but could only allow more generous benefits, this financial instability could probably be overcome by requiring that the actuaries should base all their premium rates on the maximum possible allowance and that any surplus arising from this procedure shall be equitably distributed for the benefit of the fund. The introduction of an element of profit from low disability rates and low benefits might be advantageous in keeping down the number of retirements, though it would increase the cost of the system by requiring the distribution of profits.

The Fixed Amount

The fixed amount independent of salary would necessarily be small, not greater than the salary of the lowest paid employee, and presumably not much above the minimum of subsistence for a man and his family. It would mean absolute equality of treatment for each case, regardless of such factors as the nature and extent of the impairment of earning capacity, the family obligations of the employee, the extent of the employer's responsibility for the incapacity, the length of his service or the amount of his salary. Possibly the instrument establishing the system could overcome these difficulties to some extent by providing a certain basic sum which could be added to or subtracted from in certain fixed amounts or proportions according to certain fixed rules. For example, additions could be made for each year of service, for each dependent child or for a wife. Classifications of accidents and diseases

could be established on the basis of the extent to which they constitute an impairment of earning capacity and the amount to be added to or subtracted from the basic sum could be provided in each case. It is doubtful, however, whether the time is yet ripe for so complicated an instrument, though a discretionary amount protected by maximum and minimum limitations could be provided in the instrument with a mandatory provision that the administrators shall prepare and publish such a schedule, but shall have power to modify it from time to time as experience may dictate. Such a system would, of course, be very complicated, though it might be worked out actuarially by figuring all costs on the basis of the maximum grant in case of the happening of contingencies which require a disability allowance and equitably distributing any surpluses. Effort should, however, be made to provide definite benefits in so far as the dangers of life may be anticipated so that distribution of profits shall not become an important part of the system. The object of introducing so complicated a system would be to bring about a closer relationship between the actual social and economic needs of each case than is possible through any fixed and arbitrary system.

The annuity which the accumulation from a fixed annual payment will purchase is obviously impracticable by itself as a means of providing a disability benefit after a short term of service because the number of payments made before disability occurs is small, they have not been drawing interest long, and although the employees properly retired on a disability have impaired lives and probably will not live so long as employees of the same age in active service, yet they retire at early ages and will require several payments. Some of course do live to extreme old age. What a man has saved for himself will not, therefore, be of much use if he is disabled in early life. Adequate disability benefits can only be provided on a collective or an insurance basis. Each employee could, however, be required to pay a certain fixed amount each year to be applied as a premium for the purchase of disability

The Fixed
Contribution

RETIREMENT OF PUBLIC EMPLOYEES

insurance, and the amount of the benefit could be the sum which the premium paid would purchase.

The Salary Scale

Disability Benefits Directly Dependent on Salary. Disability benefits directly dependent on salary, whether the salary used is terminal or one of its variants, or the average throughout service, require the use of a salary scale if the fund is to be scientifically administered. The objections to the use of a salary scale, discussed at length in the chapter on superannuation benefits,¹⁴ are equally applicable to a disability benefit. It introduces an unstable element into the system, it interferes with the introduction of administrative changes, it results in an element of unfairness as between classes of employees and as between individual employees of the same class, and it necessitates changes in rates of contribution. Careful examination by an actuary may show, however, that the objection of unfairness is technical rather than practical, because the differences in rates of advancement may be more than offset by the fact that accident and disease are relatively more frequent among the men in the lower compensation classes.

Disability Benefits Indirectly Dependent on Salary. To base the amount of a disability benefit on the accumulation from a contribution of a fixed percentage of salary is, of course, impracticable as a sole provision for disability for reasons already set forth. It would, however, be feasible to require each employee to pay a certain percentage of his salary as a premium to insure himself against disability occurring within the year covered by the premium. Such a procedure would permit of a relationship between the amount of salary and the amount of disability benefit and still would not require the introduction of the salary scale in computing the allowance. Exactly how such a provision would work in a particular service would have to be determined by an actuary on the basis of the disability records of that service.

¹⁴ See pages 126-137.

THE DISABILITY BENEFIT

Correlating the Superannuation Benefit and the Disability Benefit. The discussion of types of disability benefits in their relationships to salary has thus far treated the disability branch of the system as entirely distinct from the superannuation branch, but, of course, in an actual retirement system the employee who is granted a disability benefit has acquired some interests under the superannuation system. It is, of course, possible to merge all benefits in one scheme without trying to differentiate the parts. Indeed in the English system for civil service employees, which is on the assessment or cash disbursement plan without contributions, the only difference between the disability benefit and the superannuation benefit is that the disability benefit is granted to persons below sixty on medical certificate of incapacity, whereas the superannuation benefit is granted to persons sixty or over without certificate. If, however, the scheme is to be on an actuarial basis and if any attempt is to be made toward equality of return, the two branches have to be considered separately and then correlated.

Nature of
Problem

Speaking very broadly, it may be said that the disability branch of the system and the superannuation branch may be correlated in two distinct ways. The difference turns on what is done, in case an employee retires because of disability, with the reserve which has been accumulating to provide his superannuation benefit. In one case, this reserve would revert to the fund as a whole to be utilized in reducing the amount of the premiums. In the other, it would be utilized to increase the amount of the disability benefit paid to the employee who retires.

Methods

In a system which endeavors to preserve in its superannuation branch equality of return for all employees and bases the amount of the superannuation benefit on the purchasing power of the accumulation from each employee's contribution or from the accumulations made in his behalf, the plan to have the superannuation reserve or accumulation revert to the fund in the event of disability obviously occasions an inequality in

RETIREMENT OF PUBLIC EMPLOYEES

the amount of the reversion as between different employees. This inequality is traceable to two sources, differences in length of service, and, if the contributions are related to salary, differences in the salary. The longer a man has served, other things being equal, the greater his accumulation. If contributions vary with salary, in cases where the periods of service are equal, the accumulations will vary with salary and interest earned. Unless, therefore, the disability benefit is varied according to service and salary, a forfeiture of the superannuation reserve or accumulation to the fund in the event of disability produces inequality and results in a grave injustice to a man disabled after long and successful service.

If the ideal of equality of return is the dominating one in establishing the superannuation benefit, and, if the amount of that benefit is made to depend on the accumulation from contributions, which are in turn based on the amount of salary earned each year, then the logical development of the disability benefit would seem to be to utilize the accumulation from the superannuation system to increase the amount of the disability benefit in the event of disability retirement. This procedure would introduce an increase in disability benefits related indirectly to service and salary.

Under such a system, each employee would get from his superannuation contributions or those made in his behalf, their exact value in benefits regardless of the time at which he retired. Under the disability branch of the system, equality in the benefits actually received cannot be provided, because a disability system is an insurance system in which those who escape disability pay the benefits of those who unfortunately do not. Equality in a disability system must consist in providing equal insurance against disability for equal premiums. One man's dollar must be as powerful as another's in the amount of protection it will purchase.

Three different disability devices suggest themselves as being in harmony with such a general plan for the superannuation benefit. In describing them the employee will again be

THE DISABILITY BENEFIT

spoken of as paying the premiums, but it must be remembered that the devices are equally applicable if the government pays the premiums in the employee's behalf or if the cost is divided between the government and the employee. The devices are as follows:

1. That each employee be required to carry in the retirement system a fixed amount of disability insurance, payable as an annuity—probably a minimum of subsistence or possibly less—and to pay as an annual premium the sum which this insurance costs.

2. That each employee be required to pay a certain fixed amount of premium each year for disability insurance and in the event of disability be granted an annuity of such amount as this premium will purchase. Under such a system, the amount that he is to receive may be determined by his age at entrance and remain fixed throughout service or it may vary from year to year, by having each year's premium insure him against disability occurring in the year in which it is paid. The latter course might prove undesirable because the amount of benefit which could be purchased might be abnormally high in the first five years especially if a rigid medical selection of candidates for appointment is made.

3. That each employee be required to pay instead of a fixed amount, as in 2, a fixed percentage of his salary as a premium each year toward disability insurance and in the event of disability receive what the premium will purchase in the year of his age at which disability occurs. This scheme also may prove undesirable in a given service, because the benefit might be too high in the early years following entrance. Decision would have to be reached on the basis of actuary's figures applicable to the particular service.

THE AMOUNT OF BENEFIT AND THE LENGTH OF SERVICE

A relationship between length of service and the amount of the disability benefit naturally results if the superannuation reserve is used for the purchase of a disability benefit. The

RETIREMENT OF PUBLIC EMPLOYEES

increase with increasing service that flows from this source is very gradual during the early years of service, and becomes fairly rapid as the superannuation retirement age is approached. Such an arrangement seems desirable in a disability retirement system because it puts a premium on working and offers a minimum inducement to taking advantage of the system through a fraudulent early retirement. Under other types of system, arbitrary increases with increasing length of service can be introduced, just as they can in the superannuation benefit.

The Arbitrary Scale

The selection of an arbitrary scale is a matter for very serious consideration. A common device has been to grant a fixed fraction of salary for each year of service, for example, one-sixtieth under the English Act of 1859 and under the act establishing the New York City School Teachers' Retirement Fund. The employees were not eligible for disability retirement under the English Act until they had served fifteen years, nor under the New York Act until they had served twenty years. Obviously, devices of this character do not meet the requirements of a system that attempts to insure the employee against disability from the moment he enters the service. Although a disability benefit of one-sixtieth is much better than nothing, it would not be enough to lead to a man's retirement, if he could still be in attendance upon his work, nor would it sustain him if he was so ill or so injured that he was absolutely forced to resign. Even ten-sixtieths would be an insufficient allowance to induce the retirement of an employee who could in any way retain his position on the active rolls. The arbitrary scale must, therefore, start with a fairly large minimum, possibly not less than the minimum of subsistence for the employee as an individual. If less is offered, the system can hardly produce the results which those who establish it desire. Additions to this minimum must at the outset be very gradual, if any are made at all, so as to keep down the temptation toward fraudulent retirement. As the twilight zone of life is approached, the

THE DISABILITY BENEFIT

benefit, it would seem, should increase more rapidly, so that at the permissive superannuation retirement age it would merge into the superannuation retirement scale without any marked break. In the twilight zone of five or ten years before the permissive retirement age, the nice problem is to preserve a happy balance between offering the reasonably efficient employee the necessary inducements to remain in service and making the inducement so great that everyone will try to help the worn and disabled man to hang on until the goal of maximum benefit is reached. Broad steps, as was stated in the discussion of the superannuation benefit, are bad. In a disability benefit uniform steps from entrance to retirement are probably also bad, though possibly they might work well if a minimum was established for a certain preliminary period before they began to operate. Obviously, the amount of disability benefit must never be permitted to exceed the minimum superannuation benefit, and the initial superannuation benefit in all probability should never be much greater than the maximum disability benefit.

THE AMOUNT OF BENEFIT AND THE SOCIAL AND ECONOMIC NEEDS OF THE EMPLOYEE

Four Classes Considered. The relationship between the amount of the benefit and the social and economic needs of the employee can conveniently be considered under the same four heads that were used in discussing the superannuation benefit, namely, (1) a grant in aid of subsistence; (2) a minimum of subsistence, (a) for the employee as an individual, (b) for the employee as head of a family; (3) an amount which will permit the family to have the necessities of its standard of life; and (4) an amount which will give the employee practically what he had as an active employee.

The sum in aid of subsistence but insufficient to sustain the employee himself has been discussed to some extent already in connection with the question of the relationship between the amount of disability benefit and length of service.

The Sum
in Aid of
Subsistence

RETIREMENT OF PUBLIC EMPLOYEES

It was there pointed out that it would not result in retirements if the disabled employees were by any means able to hang on in the active service. It would not, moreover, be sufficient, by any means, to fulfill the requirements of justice in cases in which the disability was caused directly by the actual performance of duty. Such cases would have to be allowed a larger benefit, which, if it came from the retirement system, would necessitate drawing that difficult distinction between what was and what was not the result of the actual performance of duty. Under such a system, some employees might become charges upon public or private charity.

The Minimum of Subsistence

The minimum of subsistence for the employee as an individual would not result in the retirement of any disabled man with a family who could by any means remain in the active service and it is probably an insufficient allowance for a man disabled in the active performance of duty. Men with families of young children would have to resort to public or private charity. If such a sum is to be offered as a benefit, it would seem as if it were suitable only for the starting point in a scale applied to a service where men enter at very early ages before they have assumed family responsibilities or for services employing a considerable number of single women. Such a scale should probably provide for a fairly rapid increase to a minimum of subsistence for the employee as a head of a family.

The minimum of subsistence for a man with an average family would seem the desirable starting point and would probably be sufficient for a good many years after entrance. Such a small benefit might lead to the retention of some of the more highly paid employees who become disabled, but the more highly paid employees are generally the older men with longer periods of service and, if the benefits increased with length of service, the amount to which they would be entitled would be above the absolute minimum. From the point of view of the general public, it is probably very desirable that all employees shall be insured for a minimum of subsistence

THE DISABILITY BENEFIT

so that the dependents shall be systematically provided for and the family maintained even if the natural breadwinner is disabled.

An amount above the minimum of subsistence which will permit the family to have the necessities of life requires high payments for insurance and requires a fairly close relationship between the amount of salary and the amount of benefit. It involves so little sacrifice on retirement that it might offer a great temptation to fraud. This danger would probably be so great as to make the use of this standard inadvisable except for the maximum benefit granted, and even then its use there is doubtful.

The
Necessaries
of the
Standard
of Life

The benefit that would cause little or no sacrifice is, of course, out of the question. Even if fraud could be eliminated, it would be enormously expensive. Fraud probably cannot be eliminated and such a prize would be too great a one to offer to successful perpetrators.

The
Absence of
Sacrifice

THE COST OF THE BENEFIT

The General Factors Determining Cost. The cost of disability benefits is, of course, almost the determining factor in reaching a decision on the amount that can be allowed. If the system established provides a fixed sum per annum for all employees retired as disabled prior to the minimum superannuation age with no return of premium in event of death or withdrawal from the service for any cause other than disability, the following factors would determine the cost:

The
Factors
Enumerated

1. The amount of the benefit.
2. The amount of service required before the right to a benefit in the event of disability accrues.
3. The disability rate, which indicates at what ages disability occurs and how large a proportion of the force at that age are affected. The disability rate is frequently divided in actuarial work according as the disability is or is not the result of the actual per-

RETIREMENT OF PUBLIC EMPLOYEES

formance of duty. It would be interesting if it could be divided according as the disability is genuine or simulated.

4. The mortality rate among the employees retired on disability benefits, which indicates how many payments will have to be made.
5. The mortality rate among employees in the active service.
6. The rate of withdrawal from the service for other reasons than disability.
7. The rate of interest.

Founder's
Control
Over Cost

With the possible exception of the rate of interest, every one of the seven factors influencing cost are at least to some extent within the control of the founders of the system and its managers. Manifestly the two important factors, the amount of the benefit and the amount of service required before the right to a benefit accrues, can be fixed at will and are determined ultimately by the judgment of the legislators establishing the system. The disability rate consists of a certain minimum, which represents such resignations because of disability as would take place even in the entire absence of any disability benefits in the retirement system. These disability retirements might possibly be spoken of as an irreducible minimum if one did not entertain the hope that a retirement system, by focusing attention on the number of cases of premature disability and by providing better means for permitting care in initial stages of disease, may not in the long run reduce this present minimum. To this present minimum, a disability benefit adds the retirements of persons who in the absence of a system remain in active service. How many it adds depends on two factors within the control of the founders of the system, namely, the extent to which the benefits offered encourage or discourage retirement and the extent to which effective devices for detecting and preventing fraud are developed. Generous benefits not only lead to the retirement

THE DISABILITY BENEFIT

of many who are genuinely disabled but would not retire unless the benefits were generous, but they add new inducements to the morally weak. Devices to protect against fraud can scarcely be too highly developed in the interest of the honest employees who must ultimately bear the burden for the disabled.

The mortality rate among the employees retired because of disability is at its maximum, others things being equal, when the system is so devised and so administered that none are retired unless they are suffering from genuine serious disability due to accident or disease. These persons have impaired lives, and the average length of time which they will live is very much less than the average time that active employees of the same age will live. The average number of years that benefits will be required for them is, therefore, short. As the systems become less effective, the number of persons with minor disabilities or simulated disabilities who find their way on to the retirement rolls is markedly increased. The lives of some of these persons are only slightly impaired and, if one may judge from the statistics of some retirement systems, many of them are not impaired at all.¹⁵ They will live on to a ripe old age, receiving their retirement benefit checks regularly every month until the end. These benefit checks are, of course, drawn on the fund and are directly or indirectly paid by the other employees. The influence of the system adopted on the mortality rate after retirement is a matter of prime importance in determining cost.

The effectiveness of the system also determines in part at least the rate of mortality in the active service. In the ab-

The
Mortality
Rate of
Disability
Pensioners

The
Mortality
Rate in
the Active
Force

¹⁵ In the Police Pension Fund of the City of New York the disability pensioners have a longer expectation of life than the service pensioners of the same age. The rates of disability retirement in that fund are comparatively high. See Report on the Pension Funds of the City of New York, Part II, by George B. Buck, New York, 1916, p. 58, also Report on the Police Pension Fund of the City of New York by the Bureau of Municipal Research, 1913, pp. 168 and 170.

RETIREMENT OF PUBLIC EMPLOYEES

sence of a disability benefit, many persons whose lives are seriously impaired remain on in the active service until their death. When a disability benefit is introduced, persons of this class tend to retire on disability benefits and their deaths take place while they are disability annuitants. The establishment of a disability benefit thus reduces the number of deaths that take place in the active service. If deaths in the active service are allowed to be a profit to the system, the extent of this profit will be governed in part by the effectiveness of the disability system, being at its maximum under that system which permits the smallest number of disability retirements.

Under a very loose administration or under a poor law, the rate of withdrawal by voluntary resignation may even be affected. Some employees who would have left the service in any event cannot resist the opportunity to make a small provision for the future by going out by the door of disability retirement, instead of by the door of voluntary resignation.

The Real
Disability
Rate

The extent to which the founders of the system guard it against these evils will in a large measure determine the cost of the insurance to the employees. Somewhere lies a natural disability rate, possibly susceptible to progressive reduction by advancing science, and the object of the legislators should be to make the rate for the system approach it. To fall below it means that disabled people are being retained in the service; to exceed it means that some are taking an unfair advantage of their fellow employees. Experience would seem to indicate that the more rigorous the devices for preventing fraud the less the system is likely to cost for each dollar of benefit paid.

Differences in Cost for Different Classes of Employees. The cost of disability benefits is, of course, different for different classes of employees. Under a system that provides that all shall receive a like benefit if disabled, regardless of their age or length of service, and that each shall pay the necessary premium to pay for his share of it, leveled so that the

THE DISABILITY BENEFIT

amount that he is to pay will be the same each year, the following factors would cause differences in the premiums which the individual members would be required to pay:

1. The age at entrance into the service.
2. Sex.
3. Occupation or service class.

Regarding the exact relationship which exists between age at entrance and cost of disability retirements, no definite statement can be made, because much seems to depend on the nature of the service and the nature of the retirement system. The probability of disability increases with increasing age,¹⁶ but the probability of dying after retirement on a disability benefit seems to follow no definite rule.¹⁷ The mortality rate among persons retired as disabled in the early years of life is apparently generally very high, tending to show that persons who retire at those ages are forced to do so because of serious impairment affecting their vitality. As the age of the disability pensioners increases, the rates tend to diminish for a while and then to go up, but each system seems to be more or less a rule unto itself. Exactly what the relationship between age at entrance and cost of disability insurance will be cannot, therefore, be definitely laid down, but it can be safely said that generally there will be a difference one way or the other according to age at entrance.

Differences between the sexes in respect to premium rates **Sex** for disability insurance would be normally expected. Retirements because of disability would probably in the majority of cases be more frequent among women than among men in the

¹⁶ See Report on The Pension Funds of the City of New York, Part II, by George B. Buck, New York, 1916, pp. 380 and 381, for a table showing the comparative rates of separation from active service by disability in ten different funds or divisions of funds in New York City.

¹⁷ Idem, pp. 388 and 389, for Table of Comparative Rates of Mortality Among Disability Pensioners in the different funds.

RETIREMENT OF PUBLIC EMPLOYEES

same service, and the women retired as disabled would probably live longer than the men disabled. The forces that would produce these differences are physiological, psychological and economic, and they have been discussed more or less at length in the chapter on superannuation benefits. Differences in the nature of the occupations of the two sexes may, however, reverse the relative positions of the two sexes. It would be expected, for example, that, in the absence of fraud, the number of disability retirements would be greater among firemen or policemen than among women school teachers.

Occupation Differences in occupations and service classes may, of course, necessitate very wide differences in the cost of disability insurance. Unless such differences are recognized, employees in safe callings will be paying higher premiums than their own risks demand, whereas the employees in a dangerous calling will be paying less. It would seem that extra hazardous occupations and services should be distinguished in establishing the system and that the government should make special provision for the payment of the extra premium required to meet the special risk.

THE CONTRIBUTORY VERSUS THE NON-CONTRIBUTORY SYSTEM FOR DISABILITY INSURANCE

Distinction in Applicability Between Disability and Superannuation. The relative merits of the contributory and the non-contributory systems, which have already been generally discussed in Chapter II, require reëxamination in considering who shall pay the cost of the disability benefit. In Chapter II, the question was considered mainly as it applied to the principal benefit of a retirement system, that granted on superannuation, but the arguments for and against the contributory system are essentially different in the case of the disability benefit.

**Absence of
Right to
Return of
Full Contri-
bution on
Withdrawal**

A leading point in favor of a contributory system of payment for the superannuation benefit is that it leads to a recognition of the rights of the employee to a return of his con-

THE DISABILITY BENEFIT

tributions, or to some other benefit, if he does not continue in the service to receive a superannuation benefit. Under a disability system, a right to a return of all contribution is probably non-existent and in some cases the employee may not be justly entitled to any return. Under a superannuation system, the employee does not begin to receive any benefit from his contributions until he has reached the superannuation age; whereas, under a disability system, he begins to receive benefits at the moment he passes the minimum service requirement, in the form of constantly operating potential protection against disability. His own contributions in a disability system, or his employer's contributions in his behalf, are not accumulating in their entirety against his reaching a given age, but they are being used, in part at least, from day to day to pay the disability benefits to his less fortunate brothers who have been overcome by accident and disease. To demand a return of the entire contributions under these circumstances is like demanding the return of a fire insurance premium because the house did not burn. The most that he is entitled to ask is the return of any reserve which may have accumulated in connection with his disability insurance.

That it removes popular misapprehension of the nature of the retirement system is a second point in favor of the contributory system as applied to the superannuation benefit. If the disability system is protected against notoriously fraudulent cases of disability retirement, and if the great body of employees retired because of disability are actually broken by sickness and disease, it is perhaps doubtful if popular antagonism to the system could be easily aroused, and, in so far as the disability is the direct result of the actual performance of duty, the public would probably approve of the payment of the costs by the government and would object to its assessment apparently directly against the employee. Popular opposition to a disability system, therefore, is probably little to be feared except on the ground that the advantages are abused.

In favor of the non-contributory system, several arguments

Less
Danger of
Popular
Disapproval

RETIREMENT OF PUBLIC EMPLOYEES

Arguments in Favor of Non-Con- tributory System

may be advanced. Under it an unwarranted demand for the return of contributions because disability has not occurred would be less likely to arise. In cases of accident or disease due to the actual performance of duty or the nature of the work, the burden would be on the government. The argument could not arise that the government was making the employees insure themselves against those risks against which the government should protect them. The difficult distinction between service accidents and diseases and other accidents and diseases might be more or less eliminated. Finally, if the burden was placed directly on the government and not the employee, it might furnish an added incentive to the legislative body to attempt to remedy those conditions which tend to cause disability.

DISABILITY IN THE ACTUAL PERFORMANCE OF DUTIES

The Provision of a Special Benefit. The discussion thus far has related mainly to the benefit in event of disability not caused by the actual performance of duty, since such disability is by far the more common type in the public service. Even in such branches of the municipal government as the police department and the fire department, disability in the actual performance of duty in comparison with disability from other causes is rare.¹⁸ In some branches of the public service in fact it would doubtless be found to be so exceptional as to make an attempt to distinguish it from other disability hardly worth while. The employee disabled in the actual performance of duty would thus receive from the retirement fund the same benefits that would be paid employees retired because of ordi-

¹⁸ The recent report on the New York City Funds shows that in the Police Pension Fund for the period June 30, 1908, to June 30, 1914, the number exposed to risk was 63,330, of whom 1,295 were retired because of disability, and of these only 89 were disabled in the actual performance of duty. For the Fire Department Relief Fund the corresponding figures were 27,210.5 exposed to risk and 195 disabled, of whom only 15 were disabled in the actual performance of duty. Report of the Pension Funds of the City of New York, Part II, by George B. Buck, New York, 1916, pp. 43 and 69.

THE DISABILITY BENEFIT

nary disability; and such special provision as seemed just could be made by special legislation applicable to the particular case or by application of the general workmen's compensation law. If, however, the nature of the work of a service is such that cases of disability in the actual performance of duty occur with some frequency it would seem desirable to have special provisions for their treatment included in the framework of the retirement system.

A question perhaps naturally arises as to whether cases of disability in the actual performance of duty in services where they are comparatively frequent should be brought under the operation of the general workmen's compensation law of the State, or whether they should be provided for under the retirement system. Their omission from the operation of the general law would, of course, be justified only if the protection afforded by the retirement system were at least as good as that which the government compels private employers to give their employees. If at least equal protection for the class covered by the compensation law be assumed, provision in the retirement system would seem at present preferable. The workmen's compensation laws are generally drawn up to apply to wage workers, and a maximum wage or salary level is drawn above which they do not apply.¹⁹ Most of the men included under the operation of these laws, of course, earn less than this maximum and the legislation very properly is shaped with them in view. The maximum salary level established in the compensation law would in many public services cut across the salary scale, leaving a fairly large proportion of employees above, to whom the law would not apply. The wisdom of extending to them exactly the same provisions as apply to workmen, whose wages are more nearly

Relation to
Workmen's
Compensation
Law

¹⁹ For a digest of the compensation laws see Bulletin 185 of the United States Bureau of Labor Statistics. For the standards for compensation laws recommended by the American Association for Labor Legislation see their pamphlet, Standards for Workmen's Compensation Laws.

RETIREMENT OF PUBLIC EMPLOYEES

at the minimum of subsistence, is perhaps open to some question, especially when it is recalled that the interests of the government are not so well protected against abuses as are those of a private employer or his insurance carrier who have funds at stake. The disabled employee, moreover, already has certain rights and interests in the retirement system which will be involved by disability and the benefit on disability in the actual performance of duty could probably be better correlated with the other benefit if all were components of a single comprehensive system than if this one particular contingency were covered by a different agency. The ideal would seem to be to develop a comprehensive adequate retirement system under single management so arranged that it at least furnishes benefits in each class equivalent to those which the law requires private employers to give their employees.²⁰

In considering the establishment of a benefit in event of disability in the actual performance of duty certain fundamental differences between it and an ordinary disability benefit must be constantly kept in mind. An ordinary disability benefit, on analysis, appears to be an insurance taken out by the employees mutually, directly or indirectly, so that those who escape disability may join systematically in sustaining those who do not. The right to the benefit is created by the system and does not exist in its absence. The service disability benefit, on the other hand, is a sum in the nature of liquidated damages paid to the employee to compensate him and his dependents for injuries received. An ethical, if not a legal, right to compensation, would exist in the absence of the system. The system is merely a device for fixing the

²⁰ In the English Civil Service the government established a special system of compensation in case of injury to workmen in government establishments which was certified by the chief registrar of friendly societies as providing scales of compensation not less favorable to the workmen and their dependents than the general act provided. See "Civil Service Retirement in Great Britain," by Herbert D. Brown, Senate Document, No. 290, 61st Congress, 2d Session, p. 203, Reprinted in House Document 732, 62d Congress, 2d Session.

THE DISABILITY BENEFIT

amount of compensation and paying it promptly. The amount of benefit to be provided in event of ordinary disability is mainly a question of policy whereas in event of disability in the actual performance of duty it is to a considerable degree a question of justice.

Benefit Non-contributory. Since in paying a benefit in event of disability in the actual performance of duty, a retirement system does not originate a right, but merely furnishes a machinery for recognizing an existing one, there is no apparent ground for urging that the employees should contribute toward the cost of the benefit. Social ethics would seem to demand that the cost of such benefits should be borne by the consumers of the service from which the disability resulted. Although no doubt the ultimate incidence of the cost lies beyond the control of the legislators, the immediate and apparent incidence can be placed on the government as an employer. Public sentiment would in all probability oppose the erection of a system which placed the burden of service accidents and diseases directly on the employees themselves. As a general principle, therefore, it may be said that the cost of the service disability benefit ought to be borne by the government in the first instance.

The Amount of the Benefit. If the employees are not called upon to contribute toward the cost of the benefit, and if the government payments are not in the nature of deferred pay, the question of preserving equality of return as among individual employees is not involved. The ideal would appear to be like treatment of all cases under like circumstances. Since the number of cases of disability in the actual performance of duty is small, moreover, the government could conceivably appropriate the entire present value of an annuity for the disabled employee at the time he was retired, or if it attempted to cover the cost by the annual payment of a sum in the nature of an accident insurance premium and the calculations were

In Relation
to Salary

RETIREMENT OF PUBLIC EMPLOYEES

not precisely accurate, the deficiency would hardly be dangerously large. The objections to a benefit directly dependent on salary²¹ seem therefore scarcely applicable to a benefit in event of disability in the actual performance of duty nor does there appear reason for objection to a benefit based on the number and type of the employee's dependents.²² No reason would exist for having the amount of the employee's benefit depend in any way upon the amount of the contributions made by him or in his behalf.

Appropriate devices would seem to be, therefore, (1) the annuity of a fixed sum, (2) the annuity of a fixed proportion of salary, or (3) the annuity which considers to some extent the number and type of dependents. For a complex service with wide ranges of salary and very different occupations the fixed sum is probably inapplicable; and an annuity based in part on the number and type of dependents would probably have to be related to salary.

If a service is homogeneous and has a fixed scale of promotions based on length of service, it is perhaps questionable whether a lump sum allowance in event of service disability is not a more equitable provision than one based on salary. The man disabled in the first few years of service loses not only his individual wage but also the opportunity for advancement, which may have been an important part of his compensation.

The Extent
of the
Disability

The extent of the disability must also be taken into consideration in determining upon a scale of awards. In cases of ordinary disability if the employee is only partially incapacitated and can be given other work under the government, it is doubtful if the system should pay any disability benefit.²³

If the disability was the direct result of the actual performance of duty, however, the situation is different. The em-

²¹ For a detailed presentation of these arguments, see pp. 126-137.

²² For a statement of the arguments against such benefit when employees contribute, see pp. 239-243.

²³ For a discussion of this point, see pp. 184-185.

THE DISABILITY BENEFIT

ployee has been damaged and the system should provide for compensation. Compensation, it would seem, should depend on the extent of the injury or impairment without regard to whether the government subsequently employs the man in an inferior position or not. Subsequent employment by the government is perhaps evidence regarding the extent of the impairment, but unless it shows that the impairment is negligible it is hardly ground for refusing an award. A provision might well be introduced in the legislature, however, that the sum, injury benefit plus salary earned in the new position, shall not exceed the amount of wage or salary prior to injury. A simple legislative provision to vary the scale in proportion to the degree of injury is that of the English scheme of May, 1903, revised, December, 1907,²⁴ which established four classes: (1) Totally destroyed, (2) materially impaired, (3) impaired, and (4) slightly impaired. A different proportion of salary was allowed under each head. It would of course have been perfectly possible to have awarded a different fixed amount under each head. In connection with such a scheme the law should require the administrators to prepare and publish from time to time schedules of injuries and diseases to show how the different classes are being defined in actual practice and to insure an approach to equality of treatment of the different injured employees. The time may come when such standards have been so definitely worked out that they can be embodied in the law itself, though at present such action hardly seems feasible.²⁵

The amount of the benefit in case of total disability or of serious impairment should be at least the minimum of sub-

The
Economic
Need of the
Employee

²⁴ For the scheme see "Civil Service Retirement in Great Britain," by Herbert D. Brown, Senate Document, No. 260, 61st Congress, 2d Session. Reprinted in "Retirement From The Classified Civil Service of Superannuated Employees," House Document 732, Congress, 2d Session.

²⁵ For the standards proposed for present application in workmen's compensation laws by the American Association for Labor Legislation, see their pamphlet, *Standards for Workmen's Compensation Laws*, New York, 1916.

RETIREMENT OF PUBLIC EMPLOYEES

sistence for the disabled employee himself, if not for employee and his dependents. If the amount of the benefit is a fixed proportion of salary, care should be taken to provide that in no case shall it be less than a certain fixed amount, which in the community involved will give the employee the minimum of subsistence. Another device to accomplish this object is to provide that in making awards all salaries and wages falling below a certain fixed amount shall be regarded as being of that amount. It is, of course, a well established fact that the proportion of salary or earnings expended for the necessities of life diminishes fairly rapidly as income increases, and unless the lowest paid are given a higher proportionate allowance they will become dependents.

Correlation with Other Benefits. An important question in developing a special benefit in event of disability in the actual performance of duty is, What ought to be done with the reserves that have accumulated in the retirement system to provide the disabled employee with the other benefits had he fulfilled the conditions? The English system provided, "If, after the injury, the workman leaves the employment of the Government, the allowance shall be in addition to the pension, if any, for which he is qualified by length of service, provided that the compensation for the injury and the pension in respect of length of service shall not together exceed his pay at the date of the injury, or 300 pounds a year (\$1,440), whichever is the less." Since the service disability benefit is in the nature of compensation for injury done, the general justice of a provision that its payment shall not prevent the payment of the reserve accumulated in respect to the superannuation benefit seems manifest. If the reserve for the superannuation benefit be regarded as deferred pay, the justification for any reduction in its amount, because a service disability benefit is granted, would seem to lie in protecting the government against fraudulent claims for service disability benefits. The ordinary disability benefit is always oper-

THE DISABILITY BENEFIT

ated on the collective or insurance basis and the actuaries can so adjust the premiums that the employees will not be paying for any benefit in case of disability in the actual performance of duty nor will they be entitled to any allowance in that event. In other words, estimated accruals from this source will be anticipated in fixing the premium rates. If a high degree of collectivism is introduced into the system the superannuation reserves could of course be treated in the same way. In such a case it would doubtless be wise to give up the idea of having all the cost of the service disability benefits borne by the government as a distinct charge.

No Return in Event of Withdrawal. If all the cost of the benefits in event of disability in the actual performance of duty are borne by the government and if they are regarded as in the nature of liquidated damages for injury done, any right that the employee may have in them is merely contingent and does not become vested until the employee is injured. Should he leave the service, without having been injured in it, he is clearly not entitled to any special allowance from any fund which may have been accumulated to provide such special disability benefits.

CHAPTER VII

BENEFITS ON WITHDRAWAL FROM THE ACTIVE SERVICE WHETHER BY RESIGNATION OR DISMISSAL

The Extent of the Benefit Advocated. The Distinction Between Resignations and Dismissal. Four Arguments Against Distinction. The Desirability of the Benefit. To the Government. To the Employee. To the Public. Objections to the Benefit. Amount of the Benefit.

THE EXTENT OF THE BENEFIT ADVOCATED

Maximum
Benefit
Return of
All Contri-
butions or
Equivalent

No one, so far as is known, advocates that the employee who resigns or is dismissed shall receive any extra or special benefit from the retirement system; the most that is urged is that he shall be given the full value of such a part of the benefits promised under the system as he has earned by the services he has rendered prior to resignation or dismissal. In a wholly contributory superannuation system in which the amount of the benefit is dependent on the accumulation, the maximum proposal is that he shall receive on resignation or dismissal all his contributions with compound interest. Under more complicated systems, the maximum proposal is that he shall receive the full actuarial reserve that has been accumulated on his account, or, if the fund is operated on the assessment or cash disbursement basis, that he shall receive the equivalent of the actuarial reserve. In other words, the extreme advocates of a benefit in event of resignation or dismissal take the position that in the event of the happening of either of these two contingencies, the fund should derive no profit at the expense of the employee.

BENEFITS ON WITHDRAWAL

THE DISTINCTION BETWEEN RESIGNATIONS AND DISMISSALS

Four Arguments Against Distinction. In retirement systems, an attempt has sometimes been made to distinguish between resignations and dismissals by causing the man who is dismissed to forfeit all rights under the retirement system, whereas certain rights of the man who resigns are recognized. Such a distinction was not unnatural in a system adopted under the theory that the benefits were rewards for meritorious service or were in the nature of benevolent grants. Under such a theory, the case of the employee who is dismissed is neither meritorious nor deserving. To grant an allowance to the deserving employee who resigned seemed as far as the founders of some systems could go; and witnesses are still heard who regard such a benefit as inconsistent with proper principles. Under the more modern conception of a retirement system, as one of deferred pay for services rendered, it becomes very questionable whether such a distinction is in any way desirable if it is not highly undesirable. The chief arguments against such a distinction are: (1) that it is difficult to make; (2) that it is likely to lead to unfair discrimination; (3) that it is of doubtful administration expediency and (4) that it is of doubtful social expediency. These arguments require elaboration.

Nothing is more clear cut in theory than the difference between "quitting" and "being fired." In some services, especially if the employees are of the subclerical and manual labor class, this distinction may perhaps be easily drawn in practice, but, in the higher branches of the public service, clear-cut dismissals are rare, for the unsatisfactory employee, whether merely incompetent for his work or guilty of some fairly serious offense, is generally permitted to resign "voluntarily," though he may do so with the distinct understanding that if he does not he will be dismissed. It seems entirely unfair to grant a benefit on voluntary resignation to the man who resigns knowing that he has no defense against dismissal

Difficulty of
Making
Distinction

RETIREMENT OF PUBLIC EMPLOYEES

proceedings, while denying one to a man, who, guilty of the same offense, is not given the option to resign or who presses for regular dismissal proceedings in the mistaken belief that he has a good defense. The difficulty of distinguishing between the two may lead to rather violent fluctuations in the dismissal rates, and the profit from dismissals may become an element of financial uncertainty in the administration of a system on the actuarial reserve basis.

Discrimina-
tion Between
Employees

These difficulties in distinguishing resignations from dismissals lead to discriminations. The treatment of employees throughout the public service ought, of course, to be uniform, like penalties for like offenses; but one must allow for differences in the temperament of administrators. The highly considerate administrator who feels deep sympathy for the employee in difficulty will frequently assume that he has done his full duty in securing a voluntary resignation whereas the highly choleric administrator, filled perhaps with righteous indignation at the employee's conduct, will proceed without delay for the employee's dismissal. Political and other influence may, too, be brought to bear, if not to keep an employee in the service, at least to save his record by getting him a chance to resign.

Further disparity in penalties imposed results from the fact that the value of the benefits lost is very different in different cases. The young employee recently appointed loses almost nothing whereas the older employee's fine may be in the thousands.

Doubtful
Administra-
tive Expedi-
ency

To place the power to impose fines of so far-reaching an effect in the hands of politically appointed administrative officers, or even of administrators selected under the merit system, seems of extremely doubtful administrative expediency. In many services the officers have power, generally under more or less satisfactory restraints, to reprimand, to withhold promotion, to reduce salaries, to furlough, and to dismiss. The penalty of loss of position, subject to a proper review, seems a sufficient maximum one to place in the hands of pub-

BENEFITS ON WITHDRAWAL

lic administrators. If the employee has committed a criminal offense, it is manifestly not for the administrators to assume jurisdiction and to impose special and peculiar fines because of the employee's official position. The proper jurisdiction for the trial of a criminal case against an employee is the duly constituted criminal court where he may have all the rights guaranteed citizens under the law and where the penalty imposed is the legal penalty. An employee guilty of a serious criminal offense would properly be dismissed from the service, but it seems of doubtful propriety that because of that offense he shall forfeit to the public retirement system a sum that may be vastly in excess of any fine that could be legally imposed upon him by a court if he is found guilty. Administrators of public offices have not the machinery for doing full justice. In the federal service men are occasionally reinstated because a subsequent impartial review has shown that their dismissal was unwarranted. Necessity demands that the administrative machinery shall be trusted to a certain extent, but until it has been far more fully safeguarded than at present appears feasible, it hardly seems wise to give it the power to deprive a man of all the provisions that he has made for old age.

From the point of view of society, a forfeiture on dismissal is undesirable. It treats the man merely as an independent individual, whereas the interest of society demands that a retirement system shall treat him as the economic head of a family. When a man is dismissed for cause is the very time that the family must resort to its savings. If the government adopts a system that compels the employee to put his savings in it and then makes him forfeit those savings on dismissal, it arranges automatically that in the event of dismissal the family shall go on the rocks. Whether it will be a total loss or not will depend more on the individual efforts of its members than in the absence of a retirement system, when the government cannot touch the employees' savings except through court action. The interests of the public is that a retirement

Doubtful
Social
Expediency

RETIREMENT OF PUBLIC EMPLOYEES

system shall increase family security instead of diminishing it.

Protecting
the Interests
of the
Family

The furthest it would seem justifiable to go would be to provide that the administrative officer in immediate charge of the employee may recommend, or the wife or children of the employee, or someone acting in their behalf, may petition that benefits arising under the system to an employee about to withdraw, or just having withdrawn, may be paid for the use of the family, either as a lump sum or as an annuity. Possibly to protect the interests of the employee, he should have a right to appeal from any decision that is adverse under such a petition to him to the court having jurisdiction over domestic relations. The utility of such a provision in dealing with cases of fairly old men who have to be dismissed because of drunkenness is obvious, and drunkenness is probably the commonest cause of dismissal in the case of men who have been in the service for some time.¹

If, for any good reason, forfeiture of all rights on dismissal is regarded as essential, provision for a prompt and impartial review of the case seems imperative, especially if the employee has been in the service for any considerable period of time.²

¹ "It appears to us that a real hardship may arise from the absolute forfeiture of the member's contributions and benefits, and the tendency to relaxation of the rule is one which might well be extended to other funds that still retain the original practice [of forfeiture of all benefits and contributions]. We think no difficulty should arise from allowing the committee of management in their absolute discretion to give a refund to the member or his dependents of any amount up to that of the whole of the contributions paid by him into the fund."—Report of the Railway Superannuation Funds Committee, British Parliamentary Papers, 1910, Vol. 15, p. 26.

² "No legal right to a pension being acknowledged at present, no appeal naturally exists from dismissal at any period of a man's service, and there is nothing to prevent the exercise of this power; as the men contribute to the funds, this even now is considered a grievance; and should a claim be allowed to retire at a fixed period with a pension as a fixed scale, the grievance would be naturally intensified from the idea, which however ill-founded, would be apt to arise, that a man on approaching the time when as of right he would be able to claim his pension, would be liable to be dismissed

BENEFITS ON WITHDRAWAL

In the following discussion it will be assumed that no distinction is to be made between dismissals and resignations, and that whatever course is followed in one case will be followed in the other.

Dismissals
and Resigna-
tions Not
Distin-
guished

THE DESIRABILITY OF THE BENEFIT

To the Government. The assumption is frequently made that any benefit in the event of withdrawal is entirely contrary to the interests of the government and tends to defeat one of its principal objects in establishing a system, namely, the retention of good men in the service. "It puts a premium on withdrawal" is a frequent argument, and obviously it creates no new penalty against resigning.³ The persons advancing this argument have undoubtedly been impressed by the striking frequency with which men of demonstrated efficiency resign after becoming thoroughly familiar with the government work to accept positions in private life, sometimes even taking positions in which their experience gained in the government service is to be devoted to advance the interests of one particular group of individuals who desire to secure special privileges from that branch of the government from which the employee has resigned. To prevent these resignations they would establish a financial penalty on resignation.

Putting
Premium
on With-
drawal Not
Conclusive
Objection

A phenomenon which is no less striking, but is generally familiar only to those who have been concerned with government administration, is the tenacity with which an inefficient

Elimination
of Inefficient

for some trifling fault. Such a feeling, if it prevailed, would in the opinion of your committee be prejudicial to the service, and they would therefore recommend that after fifteen years' service an appeal might always be given against dismissal, either by the chief constables in countries, or the watch committees in boroughs and that that appeal should be to a court of quarter sessions in counties and to the town council or governing authority in boroughs."—Report from the Select Committee on Police Superannuation Funds: British Parliamentary Papers, 1877, Vol. XV, p. viii.

³ "Any retirement scheme which provides for refunds is very objectionable because it puts a cash premium upon resignation and offers a great temptation to leave the service to those still young and capable enough to get outside employment."—National Civil Service Reform League, New York, 1906, "Superannuation in the Civil Service."

RETIREMENT OF PUBLIC EMPLOYEES

person holds to a public position. If the penalty of forfeiture of contributions to a retirement system or their equivalent is to be imposed on resignation or dismissal, this hold will be strengthened. A kind-hearted administrator will find it increasingly difficult to recommend dismissal or to suggest a resignation if the action means not only loss of salary but also loss of the existing provision against old age.⁴ The fact that the employee would have something under the retirement system in event of resignation or dismissal might even operate to stimulate the retirement of the inefficient employees.⁵

Imposing a penalty in event of resignation or dismissal

⁴ The following testimony of an administrative officer working under the English system when it provided for a forfeiture in event of dismissal is significant:

"... Anyone in a position like myself would have considerable hesitation in making a formal report to the political head of the department that a certain man, after twenty years' service, is so notoriously inefficient that he ought to be discharged. Why? Because he may have done very good service the first 10, 15 or 20 years of his time, but at the present moment you find he is not efficient. Then there is no alternative between his getting a medical certificate and his full pension or his going away and leaving the whole of his pension. You want something between the two which would enable me to feel that I was not acting unjustly to the man in reporting him as inefficient. In the memorandum I have just read there are two or three at a high rate of pay whose services I should be glad to dispense with and to replace with younger men, but I would not consider it fair now to them to report them as inefficient and to discharge them without any pension. Seeing that if they remain two or three years longer, they will get their full pension in the ordinary course."—First Report, Royal Commission on Civil Establishment, British Parliamentary Papers, 1887, Vol. XIX, p. 235, q. 6071.

⁵ The following quotation from the pamphlet on "Civil Pensions for Federal Employees" (New York, 1909, p. 2) indicates that the National Civil Service Reform Association appreciates the danger of a forfeiture in event of dismissal in tending to keep men on in the service who should be dismissed. It would seem as if the same logic would result in favoring a benefit in event of resignation since distinction between resignations and dismissals is so difficult to draw in practice:

"His prospective pension is regarded as merely a part of salary already earned, but not yet fully paid. The loss of his position involves forfeiture of all right to the deferred payment. This is a heavy punishment and to inflict it, save for some very serious offense or other exceptional reason is likely to seem a mean thing to do. Such a system has a strong tendency to create a quasi property right

BENEFITS ON WITHDRAWAL

might diminish the attractiveness of the public service instead of enhancing it. The real problem of the government as an employer is not in keeping a particular man tied to a particular job by providing that if he leaves it he will have to sacrifice certain of his provisions for old age but in raising the general level of public service as a profession.⁶ One of the ways of accomplishing this is to increase the opportunities for advancement by encouraging the free circulation of employees among different governments, national, state and local, so that the man who is a success in a small position can look for normal advancement to the whole field of government service and not merely to that restricted area within the jurisdiction of the particular governmental unit for which he is working.

The Real
Problem of
the Gov-
ernment

To the Employee. To the employee, the proposal to place a penalty on resignation seems like an attempt to curtail his freedom of contract. The right to resign without loss is a sort of fire escape; few employees anticipate having to use it, but all want to know that it exists and is in working order in case of emergency. To put a barrier across the right to

The Import-
ance of
Right to
Resign

in the employee to his position, a doctrine pernicious in itself and tending to lower the standard of his efficiency."

⁶ Presser and Hamilton say in their *Teacher and Old Age* (Houghton Mifflin Company, Boston, 1913, p. 44):

"The withdrawal equity of the teacher in his own payments towards his annuity should be recognized. When he retires from the profession for any reason, dues withheld from his wages should be regarded as deferred payments invested by the state for his benefit. He is as justly entitled to the present worth of such savings as if it had been deposited by him and invested by a savings bank; otherwise the state cannot defend a program of compulsory insurance as a means of promoting thrift, encouraging saving and safeguarding old age. Young teachers who may not and usually do not remain in the profession ought not to be mulcted or penalized, even to the extent of the smallest part of their savings, for the benefit of those who do. The recognition of this equity will operate to preserve that mobility of the teaching profession that has proved so desirable on the whole to the American schools, since teachers shifting from one position or state to another would not be deterred by the prospect of the complete loss of their payments."

RETIREMENT OF PUBLIC EMPLOYEES

resign may diminish a man's opportunity to develop himself and to advance in life.

Right to
Self-
development

A critical time may come in an employee's career when he feels that he has outgrown the position that he holds and that his opportunities where he is are not broad enough really to test his capacities. A criticism that has been frequently directed against the public civil service as a professional career for young men is that, through its very certainty and its permanency of tenure, it offers too great a temptation to a man to be satisfied with less than he believes is his best, to drop into a routine performance of small duties which are too well within his capacity until his powers of growth and development have become atrophied. It is a grave question whether the conditions of the public service may not be responsible for producing mediocrity in public employees where it develops.⁷ The employees and the government should be loath to increase still further the natural forces that already tend to make employees continue on in positions for which they have long since lost their enthusiasm and in some cases even their interest.

Necessity to
Increase
Earnings

Employees who are thoroughly interested in their work and enthusiastic in developing it may find that they cannot afford to continue it. Not infrequently the government pays far less for high grade services than they will command in the general market. As an employee's family responsibilities increase, and as he has to look forward to providing for the future of

⁷ The following testimony given by the Controller of the Stationery Office before the Royal Commission on Civil Establishments (2d Report, British Parliamentary Papers, 1888, Vol. XXVII, p. 192, q. 15,583), seems worthy of consideration:

"A great many young men come into the service, and when they have been four or five years or perhaps ten years in it, they say, 'I do not see any chance of the prospects I expected,' or they see some good chances elsewhere, and if they could get some few hundred pounds, I believe they would leave the service. In that way you would have the service more contented. . . . It would add very much to the efficiency of the service by getting rid of young men who are discontented and who see no prospects in the service, and . . . , it seems to me, be an enormous benefit to the service and an economy to the public. . . ."

BENEFITS ON WITHDRAWAL

his children, he may discover that in remaining in the public service he is not only making a personal sacrifice, which he as an individual might even enjoy making, but he is letting slip the opportunity of fulfilling his fundamental duty to his family and to society. The injustice of imposing a financial penalty on a man who resigns under such circumstances would seem to be manifest. In many cases the reason why an employee resigns is that someone is willing to pay him more for his services, directly or indirectly, than the government is willing to pay. The right of the government to utilize a retirement system as a device to prevent the employee from getting the market value for his services would undoubtedly be denied by new entrants.

The right to resign partakes more of the nature of a fire escape when the employee finds himself in an intolerable position. He may discover, for example, that he has lost faith in the wisdom or integrity of the work on which he is engaged. A politician may be appointed the head of a scientific bureau and may attempt to direct the nature and the character of the scientific findings. If a retirement system could offer some particular reward of merit to the scientist who resigns under such circumstances, it would be rendering a distinct public service. Occasionally personal antagonisms develop between a superior official and one of his subordinates, especially if the superior official has been selected on other grounds than his knowledge of the work. The only course for the subordinate employee is to seek transfer to some other position or to resign. Exactly why a retirement system should seek to penalize him for relieving a situation which might easily become serious is difficult to see. It must not be assumed that these questions involve just the superior and the one subordinate. They sometimes extend to the work itself, and each of the participants may have his following. To grant the retiring employee an allowance in such a case might be argued to be subversive to discipline. That kind of discipline that produces, every time the superior officer ventures an opinion, a

Escape from
Intolerable
Situations

RETIREMENT OF PUBLIC EMPLOYEES

harmonious chorus of "Well put! I agree exactly," is not unknown in some public offices; it would undoubtedly be increased if the independent thinker, who now regards his honest opinion as the only one worth expressing, knew that he would have to sacrifice all his provision against old age, if resignation should become necessary because of his lack of tact in presenting his views.⁸ Sometimes cases arise in which an employee believes, occasionally on sound grounds, that he is being treated with grave injustice; yet he may know that any attempt to remedy the situation through an appeal to higher authorities is absolutely out of the question. The only salvation for such an employee is in getting other work, inside the service or out. The human nervous system is not constructed to withstand the nursing of such grievances, whether real or imagined, day in and day out, year after year. Those who oppose any benefit on resignation can never have appreciated the human wear and tear of a big public office. The right to resign has been spoken of as a fire escape, it might perhaps be more properly spoken of as a safety valve. The thought that he could resign in the morning if he wanted to has undoubtedly permitted many a man a good night's sleep and has brought him back to the office in the morning ready to try it again.

The
Woman
Employee

In case of women employees the establishment of a benefit in event of withdrawal is clearly necessary to meet their economic and social needs.

Prevention
of Destitu-
tion a Main
Purpose

To the Public. One of the main objects sought by the public through a retirement system is to prevent government employees from being dependent in their old age on public or private charity. This object may be defeated through a provision requiring forfeiture of rights in event of resignation or dismissal. To justify a forfeiture from the point of view

⁸ For an attack on the discipline argument, see "The Mischief of Pensions," by Michael Peters, *The Gentleman's Magazine*, Vol. 303, p. 119, London, 1907.

BENEFITS ON WITHDRAWAL

of society as a whole, it would be necessary to demonstrate that the public was more interested in one employer than in another, and that its interest in preserving stability in the force of that one particular employer offset the danger that an employee, deprived of his provision for old age under the system, might through an unwise move, be left helpless. Such a particular interest does not exist even where the people themselves are the employers. The truth of this statement is self-evident if the employee resigns from the service of the people in one government agency to reënter their service in another. The service of the city could scarcely be put above the service of the state, nor the service of the state above that of the nation. It would hardly seem as if one city should impose a penalty on a man who left it to serve another, or that one state should put barriers in the way of an employee leaving it for another. The common interests of all demand freedom of movement and the development of broad opportunities in public service. Freedom of movement will permit the highest development of experts, because it will give opportunities for knowledge of varied conditions. It is, moreover, a mistake to conceive of the employees of the government as the only persons who are rendering public service. The physician who resigns as the head of a government laboratory to become a teacher in an endowed medical school noted for its achievements in advancing medical science has only in the narrowest sense "left the public service." The number of institutions and organizations that are quasi public or are performing quasi public functions is rapidly increasing. No sound public policy, it would seem, could be served by a retirement system that would prevent the free interchange of men between the government services and reputable institutions performing quasi public functions. Both the government and the private institution would profit through the interchange because such work would offer broader possibilities; and men respond to possibilities. To attempt to draw a line between what is and what is not a public service in its

RETIREMENT OF PUBLIC EMPLOYEES

broad sense is indeed difficult. It is a question whether an employee who resigns his position as an elevator conductor in a government building operating a single car to take charge of three elevators in a large department store may not be rendering a greater public service in the latter capacity. His powers are being used in a larger way, he is producing more, and it is very doubtful if it makes very much difference to society as a whole whether the money that pays him at the end of each week comes from the taxpayers or from some other source. Society as a whole is probably less interested in exactly who passes out the counters that give the worker the right to consume from the general store of production than it is in seeing that arbitrary restraints are not imposed to keep a man from applying his productive power to maximum advantage. Though undoubtedly striking exceptions can be cited, maximum advantage to the individual employee is generally maximum advantage to society as a whole.⁹

⁹ For a strong presentation of the argument against forfeitures on resignation and dismissal, on the ground of public policy, with special reference to industrial pension systems, see "Our New Peonage: Discretionary Pensions," by Louis D. Brandeis, in his "Business a Profession," Boston, 1914, p. 76. See also "The Pension Plan for the Brewing Industry," by I. M. Rubinow, *The Survey*, New York, 1912, Vol. 29, p. 360-363. See also "Social Insurance," by Henry Seager. Professor Seager says, p. 144:

"If corporation managers can be persuaded to substitute for their establishment pension plans systems that do not interfere with the mobility of labor, such full provision may be made through these systems and through special pension arrangement for public servants of all sorts, college professors, etc., that governmental action, except to provide for public employees will be unnecessary. If, however, corporate pension plans continue to require those who benefit from them to serve long years the corporate employer promising the pension, this method of providing for old age will prove inadequate."

Mr. Brandeis says: "Adequate old age protection cannot be secured to the wage-earner through the promise of a pension from a particular concern. He should have old age insurance which will protect the wage-earner in whosoever employ he may happen to be when he reaches the period of superannuation. For the protection of the wage-earner it is likewise necessary that the pension system should confer an absolute right. No pension system can be satisfactory which makes the granting—or the continuance of a pension after it has been granted—a matter of discretion," p. 70.

BENEFITS ON WITHDRAWAL

Cases can of course be cited where employees have left the government service to apply their peculiar knowledge, gained while in the employ of the government, to advancing the interests of a particular group, in a way that is contrary to the public interest. The establishment of a penalty on resignation hardly seems, however, a feasible method of remedying this evil. It is doubtful if it would prevent many changes which are against public interests, because in such cases large advances in compensation would probably be offered to offset loss of retirement privileges. What would be stopped would be the legitimate changes in the public interest because large advances in compensation could seldom be given and the employee would not feel warranted in sacrificing his provision for old age for a slight increase in salary.

Undesirable
Resignations

The English experience in this connection is significant. The latest bills introduced into Parliament affecting the retirement systems for government employees have been concerned with facilitating transfer from one service to another without forfeitures. In the latest schemes regarding school teachers and university professors the founders have distinctly recognised the desirability of preserving mobility.¹⁰

¹⁰ The following extract from the Second Report of the Advisory Committee on the Distribution of Exchequer Grants to Universities (British Parliamentary Papers, 1912, Vol. XXII, London, 1913, p. 4): is a clear presentation of the argument for movement within the profession:

"Many of the regulations contained in existing schemes are, and are probably intended to be, in restraint of retirement or acceptance of a post elsewhere. In many cases a beneficiary after years of service can only take a post in another university by sacrificing a portion of the sum which has been accumulated for his benefit. This restraint can only be justified, if it can be justified at all, by regarding the service of a single university as a profession comparative with the civil service. The truer view is that the teachers in all the universities constitute a profession, and that transference from one university to another should not be accompanied by a financial penalty any more than is transference from one government office to another. It should be to the interest of the universities as a whole to coöperate in providing a moderate pension for all those teachers as the excellence of the staff will in certain measures depend on the pecuniary inducement to enter university service."

RETIREMENT OF PUBLIC EMPLOYEES

The
Objections
Enumerated

The Objections to the Benefit. Against a benefit in the event of withdrawal four arguments are advanced: (1) it prevents the retirement system from having the desired effect in retaining men in the service; (2) it actually encourages men to resign when in need of funds; (3) it weakens the disciplinary powers of the superior officers and (4) it greatly increases the cost of the benefits. The first and third of these arguments have already been considered in the general discussion of the desirability of the benefit.

Encourage-
ment of
Resignation

That it actually encourages men to resign when in need of money has been the experience in some funds embracing many wageworkers in the membership who are paid at approximately market rates.¹¹ They can easily secure private employment and do so for the sake of getting possession of their accumulation. It is doubtful, however, if this difficulty would be experienced in dealing with a force engaged in more highly specialized work. This danger can be overcome, moreover, by providing that on resignation or dismissal the accumulation shall be left in the fund at interest, to be paid in event of death, disability or reaching the minimum superannuation age. It has even been suggested that if the employee resigning so desires he be permitted to continue his own contributions until the retirement age.¹² The objection therefore is one that can be easily overcome.

Increases
Cost

Naturally a benefit in event of resignation or dismissal increases the cost of the benefits. The fund cannot sacrifice a profit of this kind and continue to sell its other benefits at the

¹¹ See testimony of Sir John McDougall regarding the London County Council, Thrift Fund given before the Royal Commission on Civil Service Superannuation, British Parliamentary Papers, 1903, Vol. XXXIII, p. 134, q. 3754.

Also testimony of The Chief Constable of Shropshire before the Select Committee on the Police Superannuation (Scotland) Bill, British Parliamentary Papers, 1901, Vol. VII, p. 45, q. 1144.

¹² Archibald Hewat says that retention of membership in leaving the service is generally permitted in the Widows' Funds of the Scottish Banks. See his *Experience of the Widows' Funds of Scottish Banks*.

BENEFITS ON WITHDRAWAL

same price. That is elementary. A good, all-round scheme must of necessity cost more than one that protects only against a single risk. The employees if they are well advised would gladly assume the cost of a return of contributions in event of resignation or dismissal. In each individual case it would mean only a small addition to the premium, but in the exceptional case where resignation seems the only course it would mean the difference between nothing and perhaps enough to take care of the employee for the rest of his life.

THE AMOUNT OF THE BENEFIT

The amount of the benefit, as was stated in the introductory paragraph of this chapter, would probably never exceed the contributions with interest under a wholly contributory system, nor their equivalent, the actuarial reserve accumulated to date, under a non-contributory system. The amount returned in event of resignation or dismissal in a wholly contributory system may with full and complete justice to the employee be less than the total amount of contributions with interest, if any of the benefits are in the nature of insurance against risks such as death or disability, against which the employee has been protected during his period of service and for which protection already received he should pay. Similarly, if the whole or any part of the costs of administering the system are included in the premiums and are charged to the employee, they would be deducted from the amount returned him, because it would be only fair that he should pay his share. Any further deductions are in the nature of penalties imposed on resignation or dismissal.

Under a partly contributory system provision is not infrequently made that on resignation or dismissal the employee shall receive his own contributions with interest, but that he shall sacrifice the government's contributions in his behalf, which are spoken of as payments contingent upon long service. Payments that are contingent upon long service are

RETIREMENT OF PUBLIC EMPLOYEES

clearly contrary to the interests of the employee and to the general public and it is doubtful if they will survive in retirement legislation. The principles seem to be the same regardless of who pays the premium.

CHAPTER VIII

A BENEFIT IN EVENT OF DEATH IN THE ACTIVE SERVICE, DEATH NOT CAUSED BY THE ACTUAL PERFORMANCE OF DUTY

Objects Sought in Establishing the Benefit. Objections to Benefit. Government Not Interested: Cost Increased. Protection by Private Insurance Possible. Life Insurance Unnecessary Expense, the Widows' and Orphans' Fund. The Amount of the Benefit. Return of Contributions. A Special Benefit. Amount of Special Benefit in Relation to Salary. The Amount of Benefit in Relation to Length of Service. The Amount of the Special Benefit in Relation to the Economic Needs of the Family. The Cost of the Insurance Benefit. The Contributory vs. the Non-Contributory System for a Special Death Benefit. Adjustment to Other Benefits. Summary.

Deaths in the active service must be divided into two classes: (1) those in which the death was the direct result of the actual performance of duty and (2) those in which the death was not directly due to the actual performance of duty. The present chapter is concerned with the second class, which is, of course, by far the more numerous and the more important in developing a retirement system for an ordinary service.

THE OBJECTS SOUGHT IN ESTABLISHING THE BENEFIT

The government seeks the establishment of a retirement system to provide for the elimination of the employees who have lost their efficiency through old age or disability. It has no immediate object to secure through providing a benefit in the event of death from ordinary natural causes; and its right to grant such a benefit as a pure benevolence, regardless of need, at the expense of the taxpayer may be questioned. The main interest of the government in such a benefit is to

By the
Government

RETIREMENT OF PUBLIC EMPLOYEES

pay the compensation it offers for services in a way that will meet the general requirements of the employees. As an employer the government is to a peculiar degree dependent on preserving the good will and enthusiasm of its employees. It has to depend in a large measure on the attractiveness of its general service conditions to offset the loss of opportunity for marked financial success that exists in other callings. The interest of the government, therefore, in establishing a benefit in case of death from ordinary natural causes is to satisfy the requirements of the lives of the employees.

By the
Employee

The most general fear of the ordinary employee is early death before he has had an opportunity to make suitable permanent provision for his dependents. This fear is greater even than the fear of total disability in early years because death is the more common calamity. It is of course far greater than the fear of total disability in old age because old age is so remote that few believe they will reach it, and they have difficulty in visualizing what their condition will be under such circumstances. A superannuation retirement system on the contributory basis which grants no return of contributions in event of death is therefore highly unpopular, because it makes the employees insure against a risk which they little fear, while it gives them no protection against what they regard as their greatest risk. Under a similar system operated on the non-contributory basis the same feeling will ultimately develop. The attitude of the employees will be that the fortunate who live profit at the expense of the dependents of the unfortunate who die, and since they will generally believe that they earn their benefits, they will agitate to have this evil remedied.

By the
Public

From the point of view of society the greatest danger is that, because of an early death of a breadwinner, children will be left dependent, to be cared for by relatives, friends, other private charity, or by the government. In the case of public employees it is a greater danger than early disability, because it is more common. It is probably more common, too,

DEATH BENEFIT

than superannuation dependency. Public interest is undoubtedly far better served by having citizens protect their dependent children by reasonable insurance against death than by having them protect themselves by insurance against dependency in old age. Failure to protect children during their natural period of dependency may force them into the period of economic productivity before they are in condition to render efficient service. Cutting short the period for mental and physical development under normal conditions may result in permanent impairments that will lessen the person's productive capacity for life. In case of failure to provide for extreme old age, hardship and suffering may result, but the period during which it may last is comparatively short, and it has little effect on the productive capacity of society. Reasonable provision against both dangers is probably of greater social utility than extreme protection against one at the expense of reasonable protection against the other, but if a choice were to be made by society in its own interest it would undoubtedly protect the rising generation.¹

OBJECTIONS TO BENEFIT ENUMERATED

Against the establishment of a benefit in the event of death from natural causes four general arguments are advanced: (1) the government as an employer has no interest in it; (2) it increases the cost of the retirement system; (3) it protects the employee against a risk against which he can easily protect himself through ordinary life insurance; and (4) it compels all to insure their lives regardless of their dependents, and life insurance for the man who has no one dependent on him is an unnecessary expense.

The
Objections
Enumerated

Government Not Interested: Cost Increased. The first two of these arguments are the classic objections against including

¹ For a brilliant attack on the English system as it existed prior to 1909, because of the forfeitures in event of death, see "The Mischief of Pensions," by Michael Peters. The Gentleman's Magazine, Vol. 303, pp. 113-119, London, 1907.

RETIREMENT OF PUBLIC EMPLOYEES

anything in a retirement system that is not directly and primarily in the interest of the government as an employer. The government, as was stated, is interested in including such a benefit in the system mainly because it will meet the needs of the employees and make them better satisfied with the conditions of service. The payment of such a benefit will, of course, increase the cost. It is significant, however, that the English civil servants preferred the reduction of the superannuation benefits promised them and the addition of a death benefit, the two combined to cost the government no more than the old superannuation benefit, to the retention of the old superannuation benefit with the forfeiture of all rights in event of death in the active service.²

Voluntary
Insurance
Incomplete

Protection by Private Insurance Possible. In considering the argument that the death benefit protects the employee from a risk against which he can very easily protect himself by ordinary life insurance, the experience of the English civil service retirement system is particularly interesting. Before the civil servants succeeded in having a death benefit included in the retirement system, they had carried voluntary life insurance to a high state of development. Of the several organizations for securing life insurance, the largest and most significant was the Civil Service Insurance Society. Members of this organization were insured with a private insurance company which granted to the members a discount of fifteen per cent from the regularly established premium rates of the company. It was able to make this reduction, because it was at no expense for hiring agents to assist in getting the business, and because it had only very small costs for collecting premiums. Through an arrangement with the government, all premiums were withheld from the employees' salaries and were paid to the company quarterly. In cases where the em-

² Parliamentary Debates, House of Commons, Vol. 7, No. 88, p. 766. Quoted by H. D. Brown in Civil Service in Great Britain, Senate Document No. 290, 61st Congress, 2d Session, p. 176.

DEATH BENEFIT

ployee joined the society and took out his insurance policy on entrance into the service, the medical examination of the government examiners was regarded as sufficient, so that the company was at no expense for much of the medical work. This society was thus able to offer such favorable conditions that it was very popular. But voluntary insurance did not meet the situation. Improvident men who had not taken advantage of their exceptional opportunities would die, and the penalty for their improvidence would be visited upon the widows and children. The not unnatural consequence was that the employees argued that the retirement system, which had been relieved of a liability to pay a superannuation or disability benefit by the death of the employee, should do something for the widows and children. Repeatedly it was explained to them that they were asking for something that the system had never promised them when they entered the service, that the apparent profits derived from the death of a member were what enabled the state to pay such large benefits on superannuation, and that they could easily protect themselves through life insurance. The average employee cannot get the point of view of the actuary. He judges a system on the basis of the results that it produces in individual cases, and when one of his fellow employees dies and leaves dependents he believes that the system owes something to that family.³

³ "It is obvious that the state gambles with its employee for his wages: 'I will give you a portion of your wage as you earn it; the remainder we will toss for when I have finished with you. You yourself are the coin, with life on one side and death on the other. Live, you win; die, you lose.' These are briefly the terms of the contract. 'If you lose, part of your earnings is lost to your dependents; but if you win you take what is already yours plus a portion of what is properly due to another.' This is a gamble pure and simple; as much a gamble as the State Lottery which is so popular in many countries, but which we in England do not countenance because it is immoral. It is a simple game, and, seeing that a love of speculation is inherent in human nature, the individual party to the contract is not altogether ill pleased. But there are still his dependents to be considered, and the scheme should also be regarded from their point of view.

It is in no wise to be inferred that the state gambles for her own

RETIREMENT OF PUBLIC EMPLOYEES

Under a contributory system the low paid and the improvident will argue that the contributions which they are required to make to pay for their superannuation and disability benefits are so great that it prevents them from carrying any life insurance. Under a non-contributory system, the argument is varied a little. Benefits under the retirement system will be spoken of as deferred pay, and theoretical deductions from salary will be mentioned. Then it will be said that the amount of actual salary paid is insufficient to permit of carrying life insurance. An excuse will be found for failure to insure voluntarily in private companies and for making a demand on the system for consideration.

Voluntary Assessment Beneficial Societies

The absence of a death benefit in the retirement system results, moreover, in the establishment of voluntary beneficial societies, frequently on the assessment basis. The history of these assessment associations is frequently pathetic. Somebody in the service dies, and once again the hat is passed. A suggestion is made that the thing be systematized, that an association be formed, that each member be required to pay so much on the death of a fellow member and that the proceeds be turned over to the widow or children. It is such a simple device with so many rather appealing fraternal features, it is too bad that it will not work. All goes well at the outset. Few die; therefore, few collections are made. The moving spirits in the organization can show a prospective member how little it costs to insure with the society as contrasted with the cost of insuring in an old line life insurance company, and

direct benefit; rather it is merely a case of robbing Peter to pay Paul. But Peter suffers none the less. What happens is somewhat as follows: Peter dies before he is pensionable. The total deductions made by government from the marketable value of his labours on account of pension thereupon become lost to his dependents who by reason of the early loss of Peter's wage-earning capacity need it more than if he had lived—and go instead to make up Paul's pension when he retires, whose dependents, by reason of Paul's two hands being still available, need it perhaps less than do the defrauded relicts of Peter."—"The Mischief of Pensions," by Michael Peters, *The Gentleman's Magazine*, Vol. 303, p. 116.

DEATH BENEFIT

therefore the membership grows. Later, as the average age of the members increases, deaths become more numerous and the cost of the insurance goes up. Presently all young new entrants to the service find that they can insure for less with an ordinary life insurance company than with the benevolent association; therefore, they decline to join. The membership falls off, and consequently the amount of the death benefit declines. Some old employees who have always counted on the beneficial society as a sound institution will learn toward the end of their lives that it was actuarially unsound and that although they have paid into it for years their dependents will get nothing from it when they die. It is a striking fact that such associations are permitted to exist in public services, the legislative directors of which have recognized the necessity of regulating and supervising private insurance organizations. That the establishment of a death benefit under the retirement system will largely eliminate assessment associations is an argument in its favor.

If the service contains a large number of wage workers, the retirement system can provide life insurance for them at rates far lower than the industrial insurance companies can afford to give. In such insurance a comparatively large part of the premium has to be used to pay the heavy expense of collecting the premiums. A government retirement system can collect its premiums by withholding them from the salaries or wages, and under a system properly organized the accounts need be only a little more elaborate than the ordinary payrolls. The actuarial work involved will be scarcely increased at all, because the actuaries will have to determine the death rate, whether deaths involve profit or loss to the fund. This same general argument applies in a less degree to ordinary life insurance. The retirement system can sell insurance at cost with a very small expense for administration, whereas a private insurance company, even on a mutual basis, cannot sell it for so little because their administration expenses will necessarily be higher, since they will

Insurance
at Cost

RETIREMENT OF PUBLIC EMPLOYEES

have to duplicate many of the records of the government system.

The argument that the employees can insure their lives privately seems, therefore, not a conclusive objection, because the retirement system can grant the benefit at minimum additional cost, it can provide for the conduct of the employee's insurance on a sound basis, it can make it compulsory, and it can meet the almost inevitable ultimate demand of the employees for a death benefit under the system.

Differences
in Interest
in Widows'
and
Orphans'
Fund

Life Insurance Unnecessary Expense—The Widows' and Orphans' Fund. The final objection is that it compels all to insure their lives regardless of their dependents; and life insurance for the man who has no one dependent on him is an unnecessary expense. This argument has been directed more particularly against benefits payable only to widows and orphans; and as applied to widows' and orphans' benefits, it is not without great weight.⁴ Under either a contributory or non-contributory system, the cost is generally borne by all employees more or less equally, whereas the interests of the employees in the benefits are entirely different. The great body of women employees are single, and expect to withdraw from the service in event of marriage and motherhood. The few women employees who have children are usually widows. They have no beneficiary to correspond to the wife of a married man, and their children are on an average older than the children of married men of the same age as the woman employee. The older the children, of course, the less the need for a benefit, and the less a benefit will cost. In an orphans' benefit fund a provision is generally inserted that no payments

⁴ For a particularly good discussion of widows' and orphans' funds, see testimony of Mr. James Huggett before the British Royal Commission on Civil Service Superannuation. Mr. Huggett was Secretary of the Widows' Fund of the Civil Service Insurance Association, and had given deep thought to the advisability of establishing a compulsory widows' and orphans' fund for the British Civil Service.—Report of Royal Commission on Civil Service Superannuation, British Parliamentary Papers, 1903, Vol. XXXIII.

DEATH BENEFIT

shall be made after a child has reached a given age, or after the youngest child has reached that age. Women employees, therefore, have comparatively little interest in a widows' and orphans' fund, and if one is established special provisions should be inserted to give just treatment to the women employees.

The interests of the male employees in such a fund vary widely according to their marital condition, their age, the age of their wives if married, and the number and ages of their children. The interests of bachelors vary according to the probability of their marrying and having children, which probability is undoubtedly strongly affected by their ages. The interests of married men vary according to the ages of their wives and the number and ages of their children. The old man with a young wife is a serious problem for a retirement system, because she may become a widow at a very early age and may herself live to a ripe old age, drawing a pension from the system regularly every year. Young women have sometimes been accused of marrying old men for the pension privilege, and several widows' and orphans' funds have considered it advisable to adopt some precautionary measures to guard against this, such as limiting the number of possible pension payments, reducing the amount of pension payments in case of great disparity in ages, or charging a special marriage premium at the time of marriage, based on the difference between the ages of husband and wife. The interests of the widowers vary according to the number and the ages of their children and the prospects of their remarriage, which are doubtless largely influenced by their ages. The number of variables is so great that even in a large service few men will be found who have exactly the same interest in a widows' and orphans' fund.

To attempt to work out a system of premiums that would permit every man to pay according to his interest would obviously be too complicated to be practicable, whereas to disregard entirely the factor of individual interest is likely to cause

Premium
Variation
Probably
Impossible

RETIREMENT OF PUBLIC EMPLOYEES

friction among different classes of employees.⁵ When the benefit in event of death in the active service was introduced in the English system in 1909, the decision was against a widows' and orphans' benefit and in favor of a lump sum payment to the legal representative of the employee.⁶

A Flexible Benefit

A compulsory insurance for a reasonable amount, payable to the legal representative, who may be directed to pay it to a designated beneficiary, is a flexible provision that enables the employee to apply the benefit to the needs of his family or to the needs of his estate as his judgment directs. Its very flexibility makes it less open to the objection that it compels insurance regardless of dependents, because few cannot so

⁵ "I should like to say that I have a distinct preference for a compulsory widows' annuity system, because you then are providing for the people you want to provide for; but I am afraid, if you had a compulsory annuity system, the same state of things would happen as happened in the India Office. The young unmarried men would say: 'I am not going to subscribe for the wife and children of So-and-So.' The India office wrecked a first rate scheme they had because the young men objected to paying for other men who were married. It is this attitude of the men which makes it necessary to advocate a compulsory insurance scheme instead of a compulsory annuity scheme."—Mr. James Huggett, Secretary of the Widows' Fund of the Civil Service Insurance Association, testifying before the Royal Commission on Civil Service Superannuation, British Parliamentary Papers, 1903, Vol. XXXIII, p. 52, q. 1524.

⁶ See the Superannuation Act, 1909. The following testimony regarding the Customs Annuity and Benevolent Fund given before the Royal Commission on Civil Service Superannuation (British Parliamentary Papers, 1903, Vol. XXXIII, p. 112, q. 3145 and 3146), is of interest in this connection:

3145. That fund has existed for a great many years—since 1816. It was founded by a special Act of Parliament for the purpose of enabling officers and clerks belonging to the Customs Department to make provision, by means of life insurance, for their widows and other relatives or nominees. Originally, the evident expectation was that men would more frequently insure for annuities for their widows than for anything else; but the greater freedom and advantages given by ordinary insurance for lump sums as compared with fixed annuities for widows, make it practically be turned into a life insurance society, pure and simple.

3146. A sort of survival of the fittest has established the principle of life insurance against that of providing annuities.—Yes, that is so. It has been found that the annuity system is too hard and fast as compared with the flexibility of life insurance.

DEATH BENEFIT

arrange their affairs as to be able to utilize to advantage a lump sum to be paid on their death. Under a widows' and orphans' fund, with uniform contributions for all men of the same age, a bachelor who has remained single because of family responsibilities, to assist his parents or to care for and educate younger brothers and sisters, has to pay for a benefit which cannot be applied to aid his dependents; but under the system paying the benefit in a lump sum to the legal representatives, he could direct its application to meet the exact needs of his dependents, to purchase a small annuity for aged parents, to pay for the education of a younger brother or sister, to start a brother in business, or anything else that his judgment might direct. It is significant that a plebiscite of the English Civil Service, conducted through the Deferred Pay Committee, found eighty per cent of the employees in favor of the recommendations of the Courtney Commission of 1902 for a reduction in the superannuation benefit and the establishment of a benefit in the event of death in the active service.

THE AMOUNT OF THE BENEFIT

The weight of the objection against a benefit in event of death, that it is compelling life insurance regardless of the need for it, will clearly depend in part on the amount of the benefit. In respect to the amount provided, schemes may be divided into two broad classes. The first includes those in which the size of the benefit is directly dependent on the amount of the contributions made to the fund by or in behalf of the employee, or their equivalent value under a system operated on the assessment or cash disbursement basis. The maximum benefit under a system falling in this class would be a return of all contributions or their equivalent with compound interest. Partly contributory schemes that provide for the return of the employee's contributions only, with or without interest, belong, of course, in this class. The second class includes schemes in which a definite or special benefit is provided that bears no fixed relationship to total contributions,

Two
Classes of
Benefits

RETIREMENT OF PUBLIC EMPLOYEES

or their equivalent but pays a benefit similar in nature to that secured through the purchase of a life insurance policy. Under a wholly contributory scheme that does not permit the other benefits to profit from the death of a member, the general arrangement for a special life insurance benefit would be that the employees who die in the early years of service receive more than their own payments with interest, whereas those who die in the later years receive less.

A Minimum Provision

Return of Contributions. The return of the employee's own contribution without interest in event of death in the active service is probably the minimum provision that can be made in the event of death in the active service under a contributory system. Unless a return is allowed, cases will arise in which deductions are made from the salary paid to the wife of the employee, when the employee himself died suddenly just before pay day, or when the employee was on his death bed. The employees can never see the justice of a deduction for a superannuation benefit when it is already known that the employee will never receive one. Such cases are, of course, extreme; but they are the grain of seed for a large grievance.

Payment of interest on the employee's contributions will undoubtedly prove necessary ultimately, and hence is advisable from the outset. The employees will argue that if their claim to the contributions themselves is good, then it would logically follow that their claim to the earnings of their contributions is equally good.

The demand for a return of contributions will probably extend ultimately to the payments made by the government in behalf of the employee. Under the non-contributory English scheme operated on the assessment or cash disbursement plan, the movement led by the deferred pay committee took the form of a demand for the return of the theoretical deductions from salary which the employees asserted were made by the treasury in fixing salaries to allow for the cost of the pensions. Conceivably the return of the employee's own con-

DEATH BENEFIT

tributions with interest might satisfy that sense of justice—general among employees under a retirement scheme—that demands that something be done for the family in the presence of death.

If it be conceded that the benefits under a retirement system are part of the compensation earned by the employee, the non-payment of the government's contributions toward the superannuation benefit, in event of the death of the employee in whose behalf they were made, would have to be justified by approximately the following argument. The government, being solely interested in getting rid of the superannuated and disabled, makes its contributions to provide only superannuation and disability insurance. It withholds indirectly from the active pay only a sufficient amount to provide such insurance. The apparent profits to the system resulting from the death of an employee prior to retirement are utilized in paying benefits to those who survive. If a death benefit in the form of a return of the government's contribution were to be provided, either more would have to be withheld from the employees or be paid by the government or else the amount of the superannuation and disability benefits would have to be reduced. Actuarially this argument, if supported by the facts, is unquestionably sound. The expediency of depending upon it in that difficult relationship which exists between employer and employee is doubtful.⁷

⁷ The argument from the point of view of the Actuary is thus stated by Mr. McLaughlan in his "Fundamental Principles of Pensions Funds," *Transactions of the Faculty of Actuaries*, 1908-9, p. 223:

"If a member died and his representative asked for a return of contribution they would be told that he had had the full value of his money in the shape of protection against destitution through failure of his powers of work and that he had no more right to a return of his contributions than the man who has insured his house against fire has to a return of his insurance premium if the house has not been burned.

The more the system of making returns of contributions is extended, the more does the character of the institution depart from that of a Pension Fund and approach that of a Savings Bank. Of course, if the members prefer the Savings Bank principles, the fund could be worked in that way."

RETIREMENT OF PUBLIC EMPLOYEES

A Special Benefit. If the element of insurance is introduced into the benefit in event of death in the active service, and the benefit is made something more than a suitable return of contributions or their equivalent, many possible devices suggest themselves. The discussion regarding them has to be based more on theory than on records of their operation, because this branch of retirement legislation apparently has not been so fully developed. Indeed many persons will doubtless consider that a retirement system has gone as far as it should when it gives a return of all contributions with interest or its equivalent in event of ordinary deaths. Others see in retirement systems a type of social insurance and are anxious to have them developed to the point where they give reasonable protection to the employee and his family against all the more important and more common dangers of life. Such benefits in event of death can conveniently be termed special benefits, to distinguish them briefly from the more common return of contributions.

The Types Described

Amount of Special Benefit in Relation to Salary. The special benefits in their relationship to salary can be classified under the three familiar groups (1) entirely independent of salary, (2) directly dependent on salary, and (3) indirectly dependent on salary.

Those entirely independent of salary include the three familiar subclasses (a) the discretionary amount, (b) the fixed amount, and (c) the amount which a fixed annual premium will buy. A possible fourth is, (d) the amount determined by the number and the type of the dependents.

Those directly dependent on salary allow the employee a certain proportion of his salary in event of death and may be based either on the average salary throughout service or on the terminal salary or one of its variations.

Those indirectly dependent on salary give the employee that amount of insurance which a certain proportion of his salary will purchase if paid as an annual premium.

DEATH BENEFIT

The discretionary amount, duly protected by maximum limitations, is open to the same fundamental objections that apply to all discretionary benefits, and have already been considered at length in the two preceding chapters. Under ordinary political administrations it would mean granting the maximum benefit in most cases with a few objectionable discriminations; though if the tax rates were directly affected the reverse might be the case, low payments as a general rule with the maximum to persons with strong political influence. Under able administrators highly developed rules to govern the grants might be worked out. These would doubtless be similar to the general rules followed in organized charity work and might consider the number and type of dependents, their need, and their moral character. Consideration of need and of moral character, however, mark the grant with the brand of charity and may easily result in rewarding the less thrifty and deserving at the expense of those who have made provision for their own.

**The Dis-
cretionary
Amount**

If the number and the type of dependents are to be considered, definite rules could be specifically included in the law, thereby eliminating the palpably dangerous features of discretion.

The scheme that bases the benefit on the number and the type of the dependents approaches the widows' and orphans' fund. If the system is contributory and does not adjust the amount of the contributions to the number of pensionable dependents the employee has at the moment he pays the contribution, it is likely to cause friction and may result in grave injustice if an employee has someone dependent upon him who does not fall within an established class. This difficulty can be reduced but not entirely overcome by placing bachelors in a separate class and either making no deductions from them, or by placing the deductions in a special savings account to accumulate, to be applied as a single premium in purchasing an insurance in the event of the employee's marriage or to be paid to his estate in the event he dies single. Wide variation

**The Sum
Based on
Number of
Dependents**

RETIREMENT OF PUBLIC EMPLOYEES

would remain, however, in the comparative interests of different married men and widowers.

The Fixed
Sum
Independent
of Salary

The fixed amount independent of salary, say, for example, an insurance of \$1,000, is probably applicable in forces where all the employees enter at approximately the same age, and receive approximately the same salaries and increases of salary. If the salaries vary widely, such a scheme may produce dissatisfaction among the more highly paid men on the ground that proportionately less provision is made for them than for the lower paid employees, and a demand may arise for a provision relating the amount of the insurance directly, or indirectly, to salary. Under a wholly or partly contributory system, which recognized the equities as between different employees, the contributions paid by the individual employee would have to increase from year to year as he advanced in age, to meet the increased cost of insurance at the older ages, or else the premiums would have to be leveled so as to remain constant throughout service, over-payments at younger ages being accumulated at interest to offset under-payments at later ages. Under an equitable scheme providing premiums thus leveled, the amount of contribution required would necessarily vary with the age of the employee at entrance. The young entrant would be called upon to pay far less than the older entrant. The fixed amount of insurance under a level premium could not be greater therefore than the old entrant could afford to purchase; and if the premiums were not leveled it could not be greater than the older employees could afford to purchase. Leveling would undoubtedly be necessary because the constant increase in contributions with advancing age would be very unpopular. If, therefore, the scheme were to be wholly or partly contributory, and if the ages at entrance varied widely, the fixed amount of insurance would probably have to be so small as to render the device inapplicable, even if all salaries were approximately equal.

A provision requiring the payment of a fixed sum as an

DEATH BENEFIT

annual premium toward the purchase of life insurance, and basing the amount of the death benefit on the purchasing power of that fixed sum, is a device which might meet the need of services which have an appreciable variation in the ages at which men enter and a fairly uniform rate of salaries. The amount of premium under such a system can be fixed at a figure which all can pay without real hardship. Under the level premium arrangement, the younger entrants will get a larger benefit than the older entrants, but each will get what it is considered he can reasonably afford. Such a device, however, would probably not prove satisfactory if salaries varied very widely.

The Fixed
Premium

Relationship between the amount of the special death benefit and the rate of salary can be made direct or indirect. If the relationship is direct, and if the system is operated on the actuarial reserve basis with leveled premiums, the salary scale has to be used in determining the amount of the payments to be made. The use of the salary scale for this purpose is open to the same objections that were discussed at length under the superannuation benefit.⁸ Such a device, however, permits of granting a definite proportion of salary in event of death, and might prove popular under a non-contribution system.

A Fixed
Proportion
of Salary

To eliminate the use of the salary scale, and at the same time to provide some relationship between the amount of the benefit and the rate of pay, resort would have to be had to basing the amount of benefit on the amount of the premiums paid, which would in turn depend on the salary.

The
Amount
Indirectly
Dependent
on Salary

A simple procedure would be to require each employee upon entrance to pay a certain percentage of his salary toward a special life insurance benefit. The amount of the benefit would be the amount of insurance which this premium would purchase at the age of the employee on entrance. The number of dollars of premium and the number of dollars of insur-

⁸ See pp. 127-137.

RETIREMENT OF PUBLIC EMPLOYEES

ance, as thus fixed at entrance, would remain constant throughout service.

This device could be elaborated to give a closer relationship to final salary by providing that the percentage of salary required to be invested in life insurance should remain fixed throughout service, and that whenever an employee was promoted, the new amount which thus became available for life insurance should be used to purchase a new policy of whatever amount it would buy at the age of the employee at the time of the promotion. In case the steps of promotion were small, special salary classes might be established for the purpose of arranging a special benefit in event of death, and whenever an employee passed from one class to another, he might be required to take out further insurance.

The Unit System

More promising, perhaps, than any of these devices is that of establishment of a small unit of life insurance benefit, so small that the oldest entrant at the lowest salary can afford to purchase at least one. The number of these units that the employee is compelled to purchase may be made dependent on two factors, his age at entrance and his salary at entrance. Purchase of additional units with increases of salary may be required or it may be made optional. The privilege of purchasing a limited number of additional units without any increase of salary may be granted. In a general way this plan is the one suggested in the proposed system for New South Wales, and it appears to provide the flexibility in death benefits that is desirable.⁹

The Nature of the Benefit Based on Length of Service

The Amount of Benefit in Relation to Length of Service. If the death benefit is merely a return of contributions or of the actuarial reserve accumulated in respect to other benefits, a natural relationship exists between length of service and the amount of the benefit. If, however, a special benefit in event

⁹ Establishment of a Superannuation Fund for the whole of the Government Service: Report of the Committee and of the Actuarial Sub-Committee, Sydney, New South Wales, 1912.

DEATH BENEFIT

of death is desired, the founders of the system can if they so desire arrange a system that will make the amount either entirely independent of length of service or directly or indirectly dependent on it. It is doubtful, however, if any fixed relationship between the length of the employee's service and the amount of his benefit in event of death is really desirable. Such a device undoubtedly would tend to keep men in the service, and under a non-contributory system it has an appearance of justice because it does more for the old and faithful employee than it does for the new entrant. Under a wholly contributory system, which is the real test of the equities as between the individual employees, it would require apparently one of two devices if equitably operated: (1) a constantly increasing premium as service advances, which would, of course, prove very burdensome to those to whom increased service did not bring corresponding increases in compensation or in ability to pay, (2) a leveled premium requiring in the early years of life exceptionally high payments in proportion to the risk and the amount of benefit to permit low premiums in the later years.

The main objection, however, to a relationship between length of service and the amount of the special death benefit is that it fails to recognize the history, or development, of the economic need of the average family.¹⁰ The average employee, who may conveniently be spoken of in this discussion simply as the employee, reaches the period of maximum importance to the economic welfare of his family when he is from thirty-five to forty-five years of age. After he has passed forty-five, the extent to which the family is dependent upon him for absolute necessities diminishes rapidly. When the employee is between thirty-five and forty-five, the number of children

Social
Objections
to Benefit
Based on
Length of
Service

¹⁰ For an excellent statistical demonstration of the development of this need see *Widows' and Orphans' Pension Funds*, by S. J. H. W. Allin in the *Journal of the Institute of Actuaries*, 1905, Vol. 39. See also Section III, "Statistics of Family History in Part II of the Report on the Pension Funds of the City of New York," New York, 1916.

RETIREMENT OF PUBLIC EMPLOYEES

under eighteen years of age is generally at its maximum, as is the average number of years provision, per dependent, which would have to be in hand, in event of the death of the father, if the children are all to be carried along as dependents until they have reached the eighteenth year. The widow of the employee who dies in this important decade of life is, therefore, left with a maximum financial burden. It is the period in her life when she is called upon to render the maximum service to her children as a mother and home-maker and when they will lose the most if she is called upon to take up the burden of their economic support. She is still too young to be much assisted by her children, and her parents and her husband's parents, if living, can be of assistance only if they are working fairly late in life or have accumulated property. After the average employee passes forty-five, however, his family responsibilities diminish rapidly. His children are approaching and passing the age at which they become economically independent or can sustain themselves if the father dies. The life expectancy of the mother is diminishing rapidly, and the amount that would be required to purchase her an annuity for the balance of her days is decreasing. Even if she were forced to work, as is less likely than when an employee dies at an early age, she could more easily perform dual duties, because the household responsibilities would have very greatly diminished. She would, moreover, have the assistance of older children. The family would have few dependents from the older generations. It would follow from these facts, therefore, that any device that limits the insurance in the years after marriage and before forty-five for the sake of increasing it in the years after forty-five is contrary to the interests of the employee and contrary to the interests of society.

Two
Important
Points

The Amount of the Special Benefit in Relation to the Economic Needs of the Family. In considering the amount of benefit in its relation to the economic needs of the family, two

DEATH BENEFIT

points from the preceding discussion must be kept in mind constantly: first, the needs of different employees for life insurance may be very different because of differences in the number, types and ages of their dependents; and, second, the need of any one individual employee for such insurance may vary widely during the course of his career. In reaching a decision as to the amount of the superannuation benefit and of the disability benefit, one knows at least that the employee exists and must be provided for, but in dealing with a death benefit one knows that the employee has passed on and that in one extreme case he may have left no dependents, whereas in another extreme case he may have left dependents of all classes. If an attempt is made to establish a death benefit sufficient to grant a minimum of subsistence to the average family, if the father dies at an average age, the average is being overworked, because to determine what the average family is at the average age of the father at death, one has to average the widows' ages, and average the number of children and their ages. Actuarially doubtless it could be done. Mr. George B. Buck has worked out excellent family history data for his valuations of certain of the New York city pension funds, in which widows', orphans' and other dependents' benefits are involved, but, naturally, methods of averaging have to be resorted to to reduce the vast mass of detail to workable proportions.¹¹ For the purpose of determining the extent of the liability involved by such benefits and for operating a fund on a sound basis, the method of averaging, in skillful hands, is, of course, above criticism; but to base the amount of benefit on it is a different matter. The cases of extreme deviation from the average would be cases of hardship; in the one instance because the employee would never derive any benefit, and in the other because the amount of the benefit would be insufficient to fulfill its purpose. To determine the amount of benefit by the number, type and ages

¹¹ See Report of the Pension Funds of the City of New York, P. II, New York (1916), § III, pp. 307-365.

RETIREMENT OF PUBLIC EMPLOYEES

Necessity for Preser- vation of Disability

of the dependents may increase the unfairness to those with few or no dependents, and may promote hostility to the system among a considerable body of employees. The safe rule in establishing a death benefit would seem to be, therefore, to preserve flexibility.

The general theory upon which society has proceeded for a long time is that the man himself is the best judge of the needs of his own family. In establishing a retirement system, the government departs from this general theory and compels him to accept part of his compensation in the form of retirement benefits in order that the government may protect itself against certain evils which were found to exist under the system that gave the man all his financial compensation in the form of immediate wage. Unless the government preserves flexibility in any special death benefit it may provide, it is perhaps carrying compulsion further than it should. It is doubtful whether the government is well advised in compelling a man to take part of his compensation not only in life insurance but life insurance of a particular form, and in depriving him of an opportunity to exercise his judgment as to what form of life insurance is required to meet his particular needs.

Methods of Preserving Flexibility

Flexibility is obviously to be secured first by having compulsory life insurance reduced to a reasonable minimum, and second by having it so arranged that the employee can change the beneficiaries under his policy as his own conditions of life vary. The system can well provide for optional insurance benefits which the employee can purchase from the system from time to time as his judgment directs. These optional benefits could well be offered in considerable variety with special emphasis on policies which would insure the employees not for their whole lives, but for a term of years, say from the time they purchased the policy up to the compulsory age of retirement, when an employee could protect his wife for life, if she is living at the time of retirement, by selecting a last survivor annuity as the superannuation benefit. The

DEATH BENEFIT

merit of these term policies is that they can be sold cheaply because they do not necessitate a payment in every case. For the money that would buy only a dollar of insurance for life, an employee can frequently get two dollars of insurance for a short term. An adequately developed set of optional policies would permit the employees to meet their needs. By providing cash surrender values, it would be possible, too, for the employees to readjust their affairs to meet their changing family responsibilities.

The inclusion of life insurance features is clearly to the advantage of the system from the actuarial point of view. Much of its business is necessarily dealing in annuities. If the expectation of life of the employees is gradually increasing, the system may from time to time be obliged to increase the rates it charges, because it is taking more money to pay the benefits over the longer period during which the employees are living. The insurance branch of the system manifestly operates in exactly the opposite direction. If the employees live longer, more payments into the fund on account of life insurance are made and they are at interest longer before drawn out to pay a death claim. Increasing expectation of life means, therefore, a decreasing insurance charge. If both annuities and insurance are sold by the one system, the changes tend to neutralize each other and to promote both stability of the fund and stability of the joint rates. The government, therefore, by offering these optional insurance benefits, substantially at cost to its employees, gives stability to its funds and promotes the general economic and social welfare of its employees.

THE COST OF THE INSURANCE BENEFIT

The cost of life insurance benefit under a system that provides for the payment of a fixed amount on the death of an employee in the active service from causes not directly attributable to death in the actual performance of duty, would depend in general upon five factors: (1) the age at entrance

The Factors
Involved

RETIREMENT OF PUBLIC EMPLOYEES

into the service, (2) the age at which active duty ceased, (3) the amount of benefit, (4) the rate of mortality from ordinary causes, and (5) the rate of interest. Obviously the earlier the age at which the employees go to the retired rolls, the shorter will be the period of active service within which they will be exposed to the risk of death. The risk of death, moreover, is less in the younger years than in the later, and consequently it costs less to insure a man of thirty against death before he is sixty than it costs to insure a man of thirty-five against death before he is sixty-five, though the two service periods are the same. The operation of the other factors has already been sufficiently discussed in the two preceding chapters.

If the system required each employee to pay for his own special insurance, the premiums would vary according to the age of entrance and the sex of the employee, and if the services had many different distinct types or classes of employees, some allowance might have to be made on that score. These subjects, too, have been sufficiently considered in the preceding chapters.

THE CONTRIBUTORY VERSUS THE NON-CONTRIBUTORY SYSTEM FOR SPECIAL DEATH BENEFIT

Special
Reasons
Why
Employee
Should
Bear Cost

The question of the contributory as opposed to the non-contributory system requires brief mention in connection with the special death benefit from ordinary causes not arising in the performance of duty. The government as an employer is concerned with the provision of this type of a benefit only in so far as the employees desire to have it made a part of the system, unless it adopts it partly to give financial stability to the fund. The argument in favor of having the cost of such a benefit borne by the employee would, therefore, seem stronger in the case of this benefit than in the case of the others. It would appear especially desirable that the cost of all optional benefits should be borne solely by the employee. The suggestion is sometimes made, however, that the gov-

Optional
Benefits

DEATH BENEFIT

ernment, to stimulate the employees to insure adequately, shall pay for half of any optional benefits the employee may select. The justice of such a procedure is hardly apparent, as it permits an employee to increase his compensation above that of a fellow employee who may be doing better work but who may not be in position to take out further insurance. If the government is to make appropriations to stimulate life insurance, it would seem as if it should extend the privilege equally to all citizens and not establish a specially privileged class whose optional insurance is paid for in part by the public.

The employee who resigns or who is dismissed is clearly not entitled to a return of all he has paid toward a life insurance benefit. As in the case of a benefit insuring him against disability, he has had the protection of insurance during the time he has served; had he died in that time he would have received the full benefit. His contributions have been used in part to pay the benefits of those who, being less fortunate than himself, have died. The remainder of his contributions has been accumulating as a reserve at interest, so that the premiums which he has been paying will not have to be raised in later years when the number of death benefits to be paid becomes large. To a return of this reserve, or at least a part of it, the employee is doubtless entitled. The government might with some justice claim the right to retain a reasonable part of this reserve to reimburse it for the expense to which it has been put, but it would be a small matter, as many of the resignations come within the first few years before much of a reserve has accumulated. The employee, however, cannot justly demand the whole of his contributions; his maximum reasonable demand is for the entire reserve.

Return of
Contribu-
tions on
Withdrawal

ADJUSTMENT TO OTHER BENEFITS

The adjustment of the special life insurance benefit to the superannuation benefit, and more especially to the disability benefit, requires some consideration. As was pointed out above, the term during which the employee's life is covered

The Term
of the
Insurance

RETIREMENT OF PUBLIC EMPLOYEES

by insurance—that is, the period within which the amount of the policy will be paid in case the employee dies—can, of course, be varied to meet the needs of the system. The two most probable terms are, (1) the life of the employee, and (2) the period of active service. The period of active service makes the system more nearly conform to the economic needs of the family, and allows the employee for the same premium to carry more protection at the time of life when he most needs it, but if he lives beyond the term he gets no monetary return, but he has had and enjoyed the larger protection. Under this term policy he must look to the superannuation benefit for his sole protection after retirement. Under a life term policy he is certain of a fixed return at whatever time he may die, but he can get less of this protection for the premium. Presumably uniform premiums throughout active service would be charged, though numerous variations from that are conceivable. Another possible policy varies the amount of the insurance to conform to the general needs of the family, more closely than does a uniform amount during the term of the policy. The amount would probably diminish gradually after forty-five. In this way, for the same premium more protection is given in the period before forty-five, and less afterwards.

The
Disabled
Employee

The life insurance benefit becomes of peculiar importance to the employees who have been forced to retire because of genuine disability. In all probability their expectation of life has been impaired. Frequently disability is the shadow of the end, and general dissatisfaction would arise if some provision were not made either for continuing the policy in force or for an equitable settlement. The disabled deserve a high sum if they surrender their policies, because if they do not surrender, the fund will be called upon, in the average case, for a full payment within a comparatively short time. Two possible courses suggest themselves; either that the premiums be so calculated that the employee need make no further payments toward his special insurance in event of disability, to continue

DEATH BENEFIT

it in force for the full term; or that they be so calculated that the face value of the policy may be paid either in the event of death or of total disability. The latter provision will, of course, increase the cost of the benefit and the danger of abuse through fraud; and if adequate provision is made under the disability branch of the system it may be unnecessary. Its merit is that it gives the disabled employee power to mobilize all his resources when he is permanently disabled. The provision for carrying the insurance in force for its full term is, of course, the cheaper provision, for far more interest is earned, and it is more fully protected against abuse. Whenever special insurance is provided, one of these devices or a similar one should be adopted to safeguard the interests of the disabled employee in his life insurance.

SUMMARY

In summarizing this chapter, it may be safely said that under a wholly contributory system the minimum benefit in the event of death from ordinary causes that will satisfy the natural demands of the employee is the return of all his own contributions to the fund with compound interest, less a deduction to cover the cost of protection which he has already enjoyed and consumed under an insurance benefit, such as the disability benefit. Under a partially contributory system or a non-contributory system, the employee might be satisfied with less than the equivalent of the full return required under a wholly contributory scheme, but that may be regarded as doubtful. Special life insurance benefits are popular among many employees, because they offer safe insurance at low cost, and may be introduced by the government to please its employees and to give stability to the fund by having it sell both annuities and insurance. The two chief problems in connection with special benefits are to make them flexible enough to meet the real needs of the employees and to preserve equities as between employees. To give flexibility the suggestion is made that compulsory life insurance be reduced to a min-

RETIREMENT OF PUBLIC EMPLOYEES

imum, and that voluntary insurance above the minimum be permitted. The merits of insurance for shorter terms than the span of life are marked because they permit an employee to carry more insurance at the time that he needs it most, for the same premium. Premiums on voluntary insurance should, it would seem, be borne entirely by the employee. The rights of employees retired because of disability in special benefits must be fully protected.

CHAPTER IX

A BENEFIT IN THE EVENT OF DEATH IN THE ACTIVE SERVICE, DEATH THE DIRECT RESULT OF THE ACTUAL PERFORMANCE OF DUTY

The Interests of the Three Parties in the Benefit. The Conditions Upon Which Granted. The Amount of Benefit in Its Relation to Salary. Types to be Considered. The Discretionary Sum. The Sum Based on the Number and Class of Dependents. The Fixed Sum Regardless of Dependents. The Fixed Proportion of Salary. The Amount of the Benefit in Relation to Economic Need of Employees. Benefit Non-Contributory.

Deaths that are the direct result of the actual performance of duty are so different from ordinary deaths that they must be separately considered. The subject of such deaths will, however, be touched briefly and no attempt will be made to present an elaborate or exhaustive study of the principles involved in workmen's compensation laws.

THE INTERESTS OF THE THREE PARTIES IN THE BENEFIT

The interests of the three parties to the system are manifestly different if death is the direct result of the actual performance of duty than if it results from what may be termed ordinary causes. The government, which has comparatively little interest in a benefit in event of death in the active service from ordinary causes, has a peculiar interest in event of death in the actual performance of duty. In certain branches of the public service, notably in the police force and in the fire department of municipal governments and in the military and naval services of the state and federal governments, the employees are called upon from time to time for instantaneous action involving great personal risk. To secure unhesitating service from men who are reasonably considerate of their

The Gov-
ernment

RETIREMENT OF PUBLIC EMPLOYEES

responsibilities to their families, the government must give to employees of this type some assurance that if death results from their activities suitable provision will be made for their dependents. In certain other branches of the service the work is clearly dangerous, though it does not demand the same kind of courage that is required in meeting sudden emergencies. The railway mail clerk, for example, runs many of the risks of a railroad employee; and the health officer, who has to deal first hand with cases of contagious disease, runs special risks inherent in the nature of his calling. In some cases the danger of the service may act as a deterrent to possible entrants and may prevent the proper type of men from applying unless they know that some provision has been made to compensate for the special dangers. The method of paying somewhat higher wages in the more dangerous callings will perhaps overcome the difficulties in certain cases, but it is an inadequate solution. The higher wages go to the man who escapes as well as to the man who is injured. The men can protect themselves with their higher wages only by purchasing private insurance, under which the man who escapes will help pay for the benefit to the dependents of the man who does not. Private voluntary insurance is, however, inadequate, because it is comparatively expensive and will not be generally purchased. The government will accordingly be met by the claim of the widow and children of the man who was not insured at all or who was inadequately insured. Such claims are so strong that in spite of the opposition to civil pension systems for public employees in this country, many cities have made provision for firemen and policemen.

The
Employees

The employees have the same general interests in this benefit that they have in a benefit in event of death from ordinary causes. They also naturally seek to get compensation for the added risks to which they are subjected by their work. An employee engaged in a calling recognized as dangerous finds it more difficult than the ordinary man to get his life insured in a private company and has to pay a higher premium to

DEATH BENEFIT IN THE ACTIVE SERVICE

reimburse the insurance company for the extra risk it has to take in insuring him. His natural attitude will be that this added expense, being due to his work, should be borne by the employer.

The general public also has the same general interests in the benefit in event of death in the actual performance of duty that it has in the case of death from ordinary causes, but it also has other special interests. To an increasing degree the principle is being recognized that the economic losses arising from death in the actual performance of duty are part of the costs of that service in which they occur, and that these costs should be borne by those who derive the benefit from the service, as a part of its cost. In order properly to distribute the cost of deaths over all the consumers of that service so that each may bear his fair share, the principle of insurance may be resorted to, so that each payment by the taxpayers for services shall include the amount necessary to pay the average death claims which will arise as the direct result of that service.

The interests of the public are, moreover, that these payments shall be made promptly with a minimum expenditure of time and energy in litigation, and that the amount of allowance shall depend more on the extent of the damage done to the family of the employee than on the exact nature of the circumstances under which the employee met his death. The problem is not so much to determine to a nice degree the exact merit of the deceased employee and to measure damages accordingly, with high payments in one case and little or no payments in another, but to have reasonable payments in all just cases awarded under a system that invokes minimum costs of operation.

If the government has established a system for dealing with industrial accidents and workingmen's compensation that is working fairly and satisfactorily, the whole question of deaths due to the actual performance of duty may be provided for by bringing the government as an employer under the opera-

The Public

**Correlation
with
Systems
Dealing
with
Private
Employments**

RETIREMENT OF PUBLIC EMPLOYEES

tion of that law. In any event the laws governing private employers should be considered in developing the system for the government, because the government as an employer cannot consistently do less for its own employees than it requires private employers to do for theirs.

THE CONDITIONS UPON WHICH GRANTED

That death occurred in the actual performance of duty would seem to be the only condition to the granting of the benefit. Precautions against fraudulent claims are manifestly necessary. The device of assessing the full cost of the benefit against the next tax levy and requiring publication of the facts involved in making the award would probably operate strongly in this direction.

THE AMOUNT OF BENEFIT IN ITS RELATION TO SALARY

Types to Be Considered. In discussing the amount of benefit in its relation to salary or wages only two of the three familiar classes will be considered, (1) the amount entirely independent of salary and (2) the amount directly dependent on salary. The device of having the amount indirectly dependent on salary through the payment of a certain proportion of salary as a premium for insurance, or as a deposit to accumulate, is designed to promote equality of return among the employees, but in dealing with death in the actual performance of duty the burden should not in theory be on the employees and therefore there is no reason for attempting to preserve an equality of return. The burden belongs on the consumers of the service and they should pay what the service costs society in so far as that can be determined and administered practically. Of the systems entirely independent of salary three deserve attention, (1) the discretionary system, (2) the system determining the amount by the number and character of the dependents and (3) the system granting a fixed sum or a fixed annuity.

DEATH BENEFIT IN THE ACTIVE SERVICE

The Discretionary Sum. The discretionary system would have to be operated within maximum and minimum limitations; a maximum to protect the taxpayers and a minimum to protect the dependents of the employee. The term dependents would, moreover, have to be very carefully defined. Even within careful limitations the danger of political manipulations might be great. As applied to a death benefit, moreover, a discretionary system apparently has no special or distinctive merit. For a disability benefit it may be urged by some on the ground that it will lessen the temptation to commit fraud; but in dealing with a death benefit the problem of preventing fraud is different,—it is not to lessen the temptation to retire; the employee is dead; the problem is to prevent the relatives from securing a benefit on the ground that the death was the direct result of the actual performance of duty, whereas in fact it was due to ordinary causes. Under such circumstances discretion can scarcely accomplish anything which cannot be accomplished better by less dangerous devices.

The Sum Based on the Number and Class of Dependents. The sum based on the number and the class of the employee's dependents apparently has distinctive merits as a benefit in the event of death in the actual performance of duty, because it partakes of the nature of damages paid for special injury done. All society is injured by the death of an employee in the actual performance of his duty, because his productive power is destroyed and the fruit of society's expenditures in raising him to a productive age is lost; but society as a whole cannot be compensated. Any compensation will have to take the form of an allowance from the productive forces of society to certain individuals who are regarded as having suffered a peculiar injury which can be partially compensated by a money payment. Who the persons are who have been specially damaged can be determined in practical administration either by the people as a whole, through their legislative body, or by the employee himself, or possibly by the employee

The
Special
Damage
Basis of
Award

himself within certain limitations laid down by the legislative body. The employee may be permitted to decide, by a provision requiring that payment be made to the personal representatives of all employees killed in the actual performance of duty to be distributed as the employee may by will have directed or in the absence of a will, as the law has directed. Such a device partakes as nearly, as may be, of the nature of punitive damages to be paid to the estate of the employee. The other device is for the legislature to recognize certain classes as specially damaged and to pay the damages to them direct. They take, not from the estate of the employee, but direct from the public because of damages done. The basis of a claim for special damage would obviously have to be that of special injury, and the only possible line for dividing special injury from general injury seems to be that of economic dependency. In the event of the death of an employee without dependents, it is very doubtful whether a friend of the employee should be given a right to call on the productive power of society for damages to compensate him for the loss of his friend because he has not received a special monetary injury.

Actual
Dependency
Criterion
of Special
Damage

Actual dependency would be the natural criterion for such a benefit, but several questions arise as to the extent to which actual dependency shall be recognized. In case a widow survives with one or more young children, she clearly requires a benefit to enable her to continue the service she has been rendering society in caring for those children. If there are no children and the widow is comparatively young, the question may be raised as to how far she has received a monetary damage. She has been deprived of the position in which she was earning her living, but her earning capacity has not been destroyed. If she has no further duties to perform in respect to the marriage, it may be argued with considerable weight that it is in the interests of society that she should seek gainful employment and that it is not in the interests of society that she should have the means granted her by law to live in idle-

DEATH BENEFIT IN THE ACTIVE SERVICE

ness because through accident she has lost a position in which she might have rendered excellent service. Similarly, when a widow with children remarries, a question arises whether her own benefit should continue. In the case of children the question is how long a period of dependency shall be recognized. A retirement system for the highest grade servants, conspicuous for the lavishness of its benefits, granted an annuity to daughters of the employee until their marriage, regardless of their age. Such a provision would seem foreign to American philosophy. Here the ideal would seem to be to have all self-supporting after a reasonable, if not a generous, period of tutelage. American public opinion would hardly countenance the creation by legislative action of an adult leisure class of normal individuals, even if the necessity for their becoming self-supporting may have had its origin in a service accident. It would probably regard a small cash payment at death as the maximum provision for a specially damaged active adult who had no further duties to perform in maintaining a home for dependent children. Dependent parents are sometimes provided for in the absence of widow or child. If the parents are actually dependent and are no longer capable of self-support, they would seem clearly entitled to special damages. Brothers and sisters under the age of economic independence and actually dependent upon the employee would also seem entitled to consideration on the theory of special damages. Two conditions to a grant on this theory would appear to exist: (1) special damage and (2) membership of a class the continued economic dependence of which is at least not contrary to the general interests of society.

Two
Conditions

Another important question to be considered in developing a benefit based on the number and type of dependents is whether the immediate family shall be the unit or whether each individual in the family shall be a separate unit. In one case a given amount would be granted to each family coming within the adopted definition of a family regardless of its size.

Family
Awards
Versus
Individual
Awards

RETIREMENT OF PUBLIC EMPLOYEES

In the other a given amount would be provided for a childless widow, presumably a different amount would be allowed a widow with one or more children, because she would be expected to devote most of her time to maintaining the home. To her allowance a certain amount would be added for each child with a possible maximum limit to the amount that could be paid the family as a whole. Such a device is somewhat more complicated, but it better meets the complicated situations that arise.

The Fixed Sum Regardless of Dependents. The fixed sum independent of the employee's dependents would be allowed apparently on either one of two theories, that it is a sum like an ordinary life insurance benefit or it is a sum in the nature of liquidated damages paid to the employee's estate for injury done. It is of less general social utility than a sum determined by the number and type of the employee's dependents, because it would give similar allowances to the remote relations of a man with no immediate family and to the widow and children of a married man in early middle life. Provision might have to be made in fact to restrict the classes of dependents to which payments could be made. The fixed sum even then would have no relation to the extent of the need and to the number and types of the persons specially damaged. The childless widow would receive the same amount as the widow with a considerable family. It bears, moreover, no relation to what the employee has been earning.

The Fixed Proportion of Salary. An annuity of a fixed proportion of the employee's salary has the merit of simplicity. Such a payment would naturally be made only to certain specified beneficiaries, and would hardly be made to anyone who was not a dependent of the employee. Such a provision may be somewhat unfair to the younger men, because although their salaries are lower than those of the older men, they and their families have looked forward not only to the continued

DEATH BENEFIT IN THE ACTIVE SERVICE

payment of the present salary, but to a reasonable advancement. In forces which are very homogeneous and in which the progress of the employee is determined by a definite scale, the inequity of paying more to the dependents of the older man than to the dependents of the younger is at its maximum. It would seem therefore that in a homogeneous service a fixed sum for each dependent of each class or for each family unit was the more desirable provision, but in services which are not homogeneous and have distinct classes of employees, some relationship to salary is required. This relationship could be established by paying a fixed proportion of salary in each case, or by dividing the employees into classes according to their salaries and occupations and paying fixed amounts for each dependent of each class or for each family unit.

If the relationship between salary and the amount of benefit in the event of death in the actual performance of duty is direct, and if the retirement system is being operated on the actuarial reserve basis, it would seem especially wise to adopt the device of having all the costs of a service death benefit appropriated at one time in the form of a single premium by the session of the appropriating body that meets immediately after the necessary investigation has been completed. The adoption of such a device eliminates the special dangers that arise from the use of a salary scale, and preserves to a maximum degree the solvency of the fund. A special provision might well be included, however, to require the retirement system to keep a separate account of the operation of this branch of its work, so that if any serious deviation from the expected results occur the treasury may be reimbursed for any overpayments or make good any underpayments.

**Payment
of Costs in
Single
Premium**

THE AMOUNT OF THE BENEFIT IN RELATION TO ECONOMIC NEED OF EMPLOYEES

An annuity of the minimum of subsistence for all those who were properly dependent on the employee whose death occurred in the actual performance of duty, to be paid during

**The
Minimum
of Sub-
sistence**

RETIREMENT OF PUBLIC EMPLOYEES

the whole period within which such dependency is in the best interest of society as a whole, would seem the minimum amount of benefit permissible in such cases. That amount may be regarded by some persons as too generous since it assumes, roughly speaking, that the employee, if he had not lost his life from service causes, would have continued to provide throughout that period, whereas, as a matter of fact, other natural causes might have operated to destroy his productive powers before the expiration of that period. In other words, such benefit ignores the chance that the employee might have died in the natural course of events within a short time, or might have otherwise lost his ability as a breadwinner. These chances may of course be determined mathematically and an average period arrived at as the point at which the chances of immediate cessation of breadwinning ability and the chances of long continued breadwinning ability balance. Such a computation depends at best on averages, and in arriving at such averages many factors have to be omitted. Even if the employee had not been killed in the performance of his duty and had continued as a breadwinner to the exact average, no one can tell what he might have earned for his family over and above the minimum of subsistence or what provision he might have left them, and it is doubtful if the mathematician has any data on which to base such an average. It is possible, however, to determine fairly accurately what it will cost society to carry the family along until it has fulfilled its main work, until its children have become self-supporting members of the community and until its aged dependents are beyond further need. Whether the employee himself would have been able to furnish all this support to his family had he lived is problematical, but it is certain that whether he could have provided it or not, he has lost his chance to try and somebody has to do it. The minimum of subsistence has to be forthcoming if the family is not to drop below the level of economic efficiency. In the public service it would seem that the government should assume the entire burden. If any elements

DEATH BENEFIT IN THE ACTIVE SERVICE

of charity are actually involved, it is a recognized function of many government organizations to administer relief in cases of need, and such a provision enables them to do it quietly and efficiently without much danger of pauperization.

The argument may be advanced on the other hand that a mere minimum of subsistence is entirely inadequate and that the government should provide an amount which would allow those properly to be carried as dependents the necessities for maintaining the standard of life to which they have been accustomed. The difference between the two is perhaps of little importance in forces composed mainly of comparatively low-paid employees. If numerous more highly paid men are employed and if the service has many different classes, recognition of different standards of life becomes more important. In such services, division of the employees into classes according to occupations or salaries with different provisions for each class seems feasible and possibly desirable.

BENEFIT NON-CONTRIBUTORY

For psychological reasons contributions by the employees toward a benefit in event of death resulting from the actual performance of duty may be regarded as objectionable. Although ultimately general economic laws may place part or the whole of the burden on the employees themselves, to place it there by legislation may furnish a ground for opposition to the system, and for ill feeling. The general principle is that the cost of such a death is a cost of production, and should be borne by the consumer of the product, or, as is more applicable to a government,¹ it is a legitimate cost of service and

¹ "Approaching the subject from this point of view makes clear and sharp the distinction between a straight pension and a retiring allowance for superannuated employees. The former should be conferred on civil employees engaged in hazardous occupations who suffer injury or death in the performance of duty. The entire expense of allowances or annuities granted in such cases should be paid out of the public treasury. They should be regarded as part of the legitimate cost to the public of conducting a hazardous business. The ordinary civil employee is in a very different situation.

RETIREMENT OF PUBLIC EMPLOYEES

should be borne by the consumer of the service. In order to shift it to the consumer, in so far as it may be possible to do so, it should be paid in the first instance by the employer. To get the good will and support of the employees, the apparent incidence of this benefit should be on the government as the employer.

He should be paid a proper and adequate compensation for the services he performs and there would seem no valid reason why the government employees who have been in receipt of such compensation should be erected into a special class to be supported in their old age at public expense. On the other hand, if the public employee is not paid a proper and adequate compensation for his services, any method which seeks to supply the deficiency of pensioning him when superannuated is unjust to the employee, economically wasteful, politically demoralizing and detrimental to the efficiency of the service."—Retirement Legislation in New York, New York Civil Service Reform Association.

CHAPTER X

A BENEFIT IN EVENT OF DEATH AFTER RETIREMENT

The Nature of the Problem. Death After Superannuation Retirement. The Interest of the Parties. Optional Settlements. Objections to Optional Benefits. Death After Disability Retirement from Ordinary Causes. Death After Disability Retirement,—Both Disability and Death Due to Actual Performance of Duty.

THE NATURE OF THE PROBLEM

Not infrequently an employee dies within a short time after he has passed to the retired list and become the recipient of a superannuation or a disability benefit. Under a wholly contributory system, it is at once apparent that the amount he has received in benefits is not equal to the amount he had paid in as contributions, and a demand will arise that something be done to remedy this apparent injustice. Under a partially contributory system and more especially, under a non-contributory system, the element of loss through early death will not be so immediately apparent; but ultimately the same general demand will arise for a return of the deferred pay.

In discussing the questions involved in granting such a benefit, it will be convenient to divide the subject into three heads: (1) death after superannuation retirement; (2) death after ordinary disability retirement; and (3) death after retirement because of disability resulting from the actual performance of duty. The persons who receive a benefit on resignation or dismissal ordinarily are given a lump sum, and thereafter have no further connection with the fund. If, however, the rules of the fund allow an employee to continue his membership or to receive his return of contributions only in the form of a superannuation benefit, the position of such an employee

Origin

Division
of Subject

RETIREMENT OF PUBLIC EMPLOYEES

after entering upon his retirement allowance is no different from that of the ordinary retired employee, and all may be considered under the three headings just mentioned.

DEATH AFTER SUPERANNUATION RETIREMENT

The Interest of the Parties. The benefit in event of death after superannuation retirement is clearly of interest to the government only in so far as it may promote general satisfaction in the force and prevent grievances. Among the employees, the interest naturally varies according to the number and the type of the employee's dependents and their ages. The man without dependents prefers under ordinary circumstances the largest possible annuity during his life, while he has the capacity to enjoy it, and he cares very little for any payment to his estate. The man who has only his wife to provide for, that is the married man who is childless or whose children have all grown up would ordinarily prefer a smaller annuity to be paid so long as either he or his wife shall live. The man with children still dependent on him for support is of course anxious for something which will guarantee their maintenance until they are economically independent, and if that is beyond his reach, he desires something for his life with a payment to them in case he dies in the near future. The interest of the public is that in the event of the early death of the retired employee, no dependents shall be left who will require assistance from public or private charity.

The Settlements
Described

Optional Settlements. Manifestly these various interests and objects can be met only by providing optional methods of settlements, each of equal cost to the system, and of equal financial value to the employee. For the man with himself only to provide for, an annuity for the term of his life with no payment whatsoever from the superannuation fund in event of death, regardless of when death may occur, is the preferable benefit. For the man with himself and his wife to provide for, or for the woman employee with herself and

DEATH BENEFIT AFTER RETIREMENT

one dependent to provide for, a last survivor annuity is the benefit ordinarily desired. For the man with children still dependent on him, it is more difficult to make provision, because the sum available to deal with may be too small to meet the situation adequately. A possible device is the payment of an annuity to the employee for life with the provision that if he dies before a certain time his children shall be paid a certain amount; in other words, part of the accumulation is used to purchase term insurance on his life for the benefit of his children. The amount of this insurance may remain fixed for the whole term or may be made to diminish gradually as the end of the term is approached. Possibly such an employee might be granted an annuity for his life with the provision that if he should die before his youngest child was eighteen the annuity should be continued to his family until such time as the child should have become eighteen.

The amount of the benefit which can be secured through the exercise of one of these options will depend mainly on the number of beneficiaries and their ages. To pay an annuity to a man or his wife so long as either of them survive must of course cost more than to pay an annuity to the man alone. Paid to the man alone, it stops on his death, but paid to the man or his wife so long as either survives, it may be paid to the wife for several years after her husband's death. If the annuity is for the life of the man with payments guaranteed until the youngest child shall have reached eighteen, it will cost more than an annuity for the life of the man only, for if the man dies before the child is eighteen, payments must be continued until the child is eighteen. The man who retires early, as has been previously noted, cannot purchase as large an annuity for a given sum as a man who retires at a more advanced age; the younger man under ordinary circumstances will require more annuity payments. If two men are of exactly the same age and have exactly the same accumulations and each selects a last survivor annuity for himself and wife, they will get identical annuities only in case the ages of the

**Factors
Affecting
Amount of
Benefit**

RETIREMENT OF PUBLIC EMPLOYEES

wives are the same; if one wife is older than the other, the couple containing the older wife will receive the larger annuity. If a life payment is selected with payments guaranteed until the youngest child reaches a certain age, say eighteen, the amount of the annuity, if fathers are of the same age, will turn on the age of the youngest child. The man with a very young child will receive less, of course, than the man whose youngest child is already nearly eighteen. These elementary conditions governing the amount of the annuity available must always be kept in mind in planning a system. Under an annuity scheme those who live to extreme age profit at the expense of those who die. As this element of profit from early deaths is diminished, the amount of benefit must be diminished unless the contributions to the system are increased.

Objections to Optional Benefits. The introduction of optional benefits to give the employees something in the nature of a benefit on early death after superannuation retirement is of course open to the objection that it increases cost. Costs are increased probably in three principal ways: (1) most employees will select a last survivor annuity or a children's annuity and hence these forms will tend to become the standards in determining what is reasonable, instead of the cheaper annuity on a single life; (2) administration costs will be increased because considerable additional actuarial work will be required in valuing the various optional benefits and because the system will have to keep track of the widows, children and other relatives who may be made beneficiaries. (3) granting optional benefits will result in a selection against the system; some employees and their relatives may even go so far as to be examined by physicians to determine their condition before making their election, and the general tendency will be for those with impaired lives to take survivorship annuities or children's annuities whereas those who are in excellent condition will take their chances in selecting the higher benefits.

The soundness of these three arguments tending to show

DEATH BENEFIT AFTER RETIREMENT

an increase in cost as the result of offering optional benefits can hardly be directly questioned, though it is difficult to say to what extent they would actually operate. It must be remembered, however, that two of the reasons which the government as an employer has in establishing a retirement system are to attract men to its service and to hold the men who in the absence of a retirement system resign to accept other positions, although they have proved highly successful in the work of the government. Some retirement system has to be adopted to provide for the elimination of the disabled and the superannuated. After that object has been secured, the question becomes, would new entrants be attracted more by a higher immediate wage and rigid low superannuation benefits or by a lower immediate wage and higher flexible benefits, and would the older employees be more firmly held by the one system or the other? The exact answer to these questions is difficult to give. The English experience tends to show that the immediate wage is the more important consideration in drawing men to the service and that benefits under the retirement system operate to hold them after they are in. The merits and defects of retirement systems, however, are not yet well known. It would seem that if the government adopted one that went far toward meeting the needs of all employees through flexible benefits, it might by judiciously advertising the merits of that system make it not only a powerful agency for retaining men in its service, but also for drawing good men to it. The attractiveness of a system that would give adequate all-round protection at cost has not yet been fully utilized.

DEATH AFTER DISABILITY RETIREMENT FROM ORDINARY CAUSES

Disability retirement is essentially different from superannuation retirement because the cost of it cannot possibly be paid for out of an individual's contributions in his own behalf if it occurs in the earliest ages, but must be provided for by an insurance device. It would seem, therefore, that if any

RETIREMENT OF PUBLIC EMPLOYEES

benefit in event of death after disability not arising from the actual performance of duty is to be provided, it should take the form of life insurance applicable to all, so that the man who died in harness would be treated as favorably as the man whose death was preceded by disability retirement. The questions therefore have been sufficiently considered in the chapter dealing with a benefit in event of death in the active service.

DEATH AFTER DISABILITY RETIREMENT

BOTH DISABILITY AND DEATH DUE TO ACTUAL PERFORMANCE OF DUTY

If the death itself and the disability causing the retirement prior to death were both the direct result of the actual performance of duty the situation is of course very different from that arising where the death after disability retirement was due to ordinary causes not directly connected with the actual performance of duty. The obligations of the government as an employer are manifestly different, as also are the rights of the employee and the interests of the public, but although the two classes of cases are clear and distinct in theory, they are by no means clear and distinct in practice. Unfortunately the general tendency of human nature is to attribute all disability to causes arising in the actual performance of duty if something is to be gained thereby. The methods for determining the truth are very unsatisfactory in that broad band of border line cases which lie between the clear-cut service accident and the disease which could by no possibility have been caused by the actual performance of duty. If disability in performance of duty has been established within the requirements of the retirement system and the employee has received a benefit on that ground, it is very difficult to oppose the contention when death occurs that it was indirectly due to the disability resulting from the actual performance of duty. It may easily and perhaps truthfully be contended that the service accident or disease that necessitates retirement

DEATH BENEFIT AFTER RETIREMENT

weakened the employee's vitality and hence a disease not remotely connected with the cause of the disability proved fatal, whereas if it had not been for the service accident or disease the deceased employee would have been able to resist it. The difficulty of determining the real facts as to the cause of death in any except the simplest cases is the principal obstacle in dealing with deaths after a disability retirement because of service accident or diseases.

If the fact that the death was due to the actual performance of duty can be satisfactorily established, the proper procedure would seem to be to consider the case as if no period of disability had intervened, especially if death occurred within a comparatively short time after retirement on disability, and to grant to the family of the employee the usual benefit paid in event of death in the active service from causes arising in the actual performance of duty. The period within which death must occur after disability retirement, if the employee's dependents are to receive the special death benefit, might conceivably be limited as one of the precautionary devices to safeguard the system. The general discussion of the benefit in event of death in the active service is applicable to this subject.

CHAPTER XI

THE EMPLOYEE WHO BECOMES INEFFICIENT FROM CAUSES OTHER THAN ACCIDENT, DIS- EASE, OR OLD AGE

The Problem

In government service an administrative officer is occasionally troubled by an employee who is neither old nor ill and yet is not up to even a low minimum standard of efficiency. "Deadwood" such employees are sometimes called. In private business in a great majority of cases such employees would undoubtedly be dismissed with scant ceremony. In the public service they are not infrequently carried along from one administration to another, because no one takes the initiative in forcing their resignation and there is always the hope that some new device will stimulate them to reasonable activity and accomplishment. To a certain extent they may be the product of the conditions of the public service itself. They may be men who have lost all ambition because they could see no chances of advancement ahead of them, or they may be the product of political interference in the administration of the office,—on the one hand the man who knows that he is safe so long as a certain politician retains power, and, on the other, the man who is unwilling to keep on trying because he believes that all the rewards go to the man with influence and he himself has none. The cause of their inefficiency one may classify as moral.

Solutions Attempted

These employees, inefficient from moral causes, become a problem for persons concerned with retirement systems and their management, because administrative officers responsible for such employees are naturally desirous of getting rid of them and will seize upon the retirement system as a suitable agency. In the English civil service two covert devices were

THE INEFFICIENT EMPLOYEE

adopted, retiring such employees as physically or mentally disabled on the certificate of the employee's physician, or reorganizing the office in which they were employed and eliminating them on what were called "abolition terms," extra grants allowed on the ground that the work which they were able to do was no longer required by the government. The abuse of "abolition of office terms" in this way became so great that they were eliminated by the law of 1887, which gave the Treasury discretionary power to grant an allowance not to exceed the disability allowance "where a civil servant is removed from his office on the ground of his inability to discharge efficiently the duties of his office and a superannuation allowance cannot be lawfully granted to him." Special report had to be made to Parliament regarding all grants of this nature.¹

Each of these devices is open to the general objections that they are enormously expensive and put a premium on inefficiency. If the disability benefit is to be large enough to be of real social utility in providing for the man who is physically or mentally disabled, society can scarcely afford to have it granted to men who are inefficient without excuse. Any system that gives the inefficient who withdraws any allowance over and above that granted to the efficient who resigns is open to the obvious objection that it encourages inefficiency on the part of anyone who is considering resignation.

The return of all contributions, or their equivalent, for benefits not yet received would seem to be the maximum grant to inefficient employees on their retirement. Such an allowance might encourage the removal of inefficient employees, whereas if no allowance of any sort is paid, the inevitable tendency is to increase their hold upon their positions and to increase the temptation to slip them over to the disability retirement roll.

Objections
to Solutions

Return of
Contributions

¹ See evidence before Royal Commission on Civil Establishments, especially First Report, p. 401, q. 10,164 (British Parliamentary Papers, 1887, Vol. XIX).

RETIREMENT OF PUBLIC EMPLOYEES

That a mere return of contributions will not result in the dismissal of all incompetents must be admitted, but the solution of the problem of the inefficient from moral causes does not seem to be within the scope of a retirement system. A well-developed system may tend to reduce the number of such cases in the ways indicated in the discussion of the purposes sought in the establishment of such a system given in Chapter I, but to include a special benefit for the elimination of the inefficient without excuse seems thoroughly undesirable. The solution of this problem appears to be in devising an adequate method for separating the excusably inefficient from the inexcusably inefficient and submitting the latter to all the stimulating devices at the disposal of the administration. If these devices do no good, dismissal with a return of contributions appears to be the proper course.

CHAPTER XII

A BENEFIT IN THE EVENT OF THE ABOLITION OF POSITION OR REORGANIZATION OF OFFICE

A risk run by the employee in certain branches of the service is that the work which he has been doing may become no longer necessary to the government or that some improvement in organization, or some labor-saving device, may enable a smaller number of employees to do all that kind of work needed. The United States Pension Office a few years ago had to discharge a large number of employees because of the diminishing volume of the pension work and the reorganization of the office. The introduction of labor-saving devices in auditing has diminished the number of persons required for such work in some public offices. The assertion may be made that a special provision for such cases should be included in an adequate retirement system. The English Superannuation Act of 1859, as was mentioned in the preceding chapter, authorized the granting of a special benefit in event of abolition of positions or reorganization of office.

The
Problem

Strong theoretical arguments can of course be introduced in support of such provisions. On behalf of the government it may be urged that they facilitate the introduction of improvements in organization, methods and machinery, and they tend to prevent the continuance of an activity that is no longer really necessary. On the behalf of the employees it is urged that the special benefit compensates him for the loss of his position, which he had expected would be permanent and for loss of that capital which knowledge of the government work constituted. The government work is of course largely monopolistic; skill, knowledge and training secured in the government service are not infrequently of comparatively little value

The
Argument
for a
Special
Benefit

in the commercial world, for commercial business is not done in the same way. Because the changes introduced by the government have diminished the earning power of certain employees, it may be argued the government owes these employees some compensation.¹ On behalf of the public it may be urged that the cost of these special benefits will be more than saved to the public from the increased economies due to the reforms introduced.

The
English
Experience

The granting of special benefits proved objectionable in the English civil service and under the present system no more is allowed than if the employee had retired because of ill health; and the disability allowance in the early years under the English system is comparatively small. The objections to the device were that it permitted able-bodied persons to be supported at least in part from money derived from the taxpayer;

¹ The case in favor of a special benefit in event of reorganization of office was clearly presented in a memorandum submitted by the employees of the Poor Law Commission of Ireland, published in the Report of the Commissioners on The Operation of the Superannuation Act, British Parliamentary Papers, 1867, Vol. XXIV, p. 13.

"It is submitted that on the question of pension on abolition of office other considerations present themselves which appear to give a fair and just claim for a larger pension than if the party retire on superannuation. A man may, after serving for a considerable number of years on a small and insufficient salary, have only just entered on the enjoyment of one commensurate with his merits and services and which he looks upon as a requital for the deficiencies of former years, when new arrangements are made with a view to effect a saving in the public expenditure, his office abolished, and he thrown out of employment through no default of his. A man so circumstanced cannot, after having devoted the best years of his life—and these in which his mind is most capable of receiving new impressions—to the public service, hope to enter upon a new walk with a reasonable prospect of success. The business knowledge required in a government department is comparatively valueless in the outside world, and it is in vain for him to hope to struggle successfully against the host of well-trained and qualified competitors he will be certain to encounter in any other pursuit he may select; and, therefore, unless his services be transferred to some other department of the state as the terms on which he held his office at the moment of its abolition, it is submitted that a serious injury has been inflicted on him, in order that the public may be benefitted. It is, therefore, conceived that it is only just that the public should compensate him to an extent commensurate with the injury."

REORGANIZATION

it resulted in reorganizations made to advance the interests of a particular clique or group dominating the office; and it furnished a means of rewarding the inefficient by retiring him to leisure with more than he would have received had he been disabled.² The conditions of American public service would

² 107. "We come now to a clause in the Superannuation Act (clause 7) which has given rise to very great abuse. Under the provisions of this clause, a civil servant whose office is abolished, or who is compulsorily removed from the service in order to facilitate arrangements by which greater economy and efficiency may be secured, may receive a compensation allowance calculated on the same scale as if he were qualified for a pension, but with addition to his actual service of a number of years varying with the length of such service, as follows:

Under 5 years' service.....	addition of	1 year
Above 5 and under 10 years ...	addition of	3 years
Above 10 and under 15 years ...	addition of	5 years
Above 15 and under 20 years ...	addition of	7 years
Above 20	addition of	10 years

The intention of this clause was to facilitate arrangement by which greater 'economy and efficiency might be secured,' but in practice this result has not been always attained.

The clause has been too often used to get rid of inefficient men who have, upon the plea of 'abolition of office' really received extra pensions for their inefficiency and as a means for securing a flow of promotion; and though it would not be correct to say that the public service has derived no benefit from the operation of the clause we believe that on the whole, it has worked unsatisfactorily, and that the power conferred by it has sometimes tended to laxity of discipline. The knowledge that it would be possible, by nominal reorganization of office, to grant a pension to a clerk who failed to perform his duties satisfactorily has not improbably led in some instances to cases of indolence and inefficiency being lightly treated or altogether condoned which, had no such provision existed, the responsible officers would have felt it necessary to correct at the outset by admonition or stoppage of increment. Any large reorganization of an office or offices should in future be invariably carried out by means of an act of parliament or at least by provisional orders in council approved by parliament. The abolition of a single appointment is best effected by transferring the officer to another department, if possible, or by attaching other duties to him temporarily or by not filling the vacancy when by promotion or otherwise it occurs.

III. And as regards the individual clerk, we must again urge that due attention must be paid to each man's work and progress and better securities taken in accordance with our suggestion that only fit men shall be kept in the service and only meritorious ones promoted and this being so, we believe that in the future at all events

probably give rise to even greater abuse of such a provision and its inclusion in an American law would doubtless lead to wholesale reorganizations on changes of administration.

Transfers

The inclusion of such a benefit seems in fact unnecessary. If the employee is still young or reasonably young the government could provide for his transfer to some other position where his services can be utilized, and, as before mentioned, the retirement system should be so closely connected with the selecting and appointing agencies that it could place the employees.³ If the employee is of advanced age his rights under

the exercise of such power will seldom be found necessary. It must be made plain by express notice to every member of the service, that without other demerit, he may be required to retire from it upon grounds of unfitness, receiving back the amount of his contribution toward pension, with compound interest therein, as suggested by us, but without any further sum.

112. We fully recognize the difficulty of thus removing clerks who may have given some years of service to the government; but this difficulty is lessened in proportion as they are removed at an early stage of their service. Be the difficulty, however, what it may; it must be resolutely faced, as we feel convinced that it is indefensible to grant pensions in such cases.

113. We recommend therefore the immediate repeal of this clause of the act of 1859."—Second Report Royal Commission on Civil Establishments; British Parliamentary Papers, 1888, Vol. XXVII, pp. xxiv and xxv.

³Steps should be taken by the government to ascertain thoroughly the separate wants of the various departments, and fresh men in any case should only be brought into the service when the vacancies cannot be filled by redundant men within it. And as regards the future, more consistent and organized efforts should be made to effect transfers. In the earlier years of service experience of more than one department is of value on both sides. It should be made perfectly clear that all clerks entering the service are liable to be called upon to serve at any time in any office, and the difficulty which at present exists in carrying out such transfers will be greatly lessened when the regulations are made more uniform throughout the service, and the prospects and advantages of the various offices are more generally equalized, *idem*, p. xiii.

The proposal for transfers is, however, not without its own difficulties. The attitude of government administrators in general is probably typical by the following testimony given before the Royal Commission on Civil Establishment (p. 336, q. 19,209). It would seem, however, that the inefficient clerk who is not disabled should not be eliminated through the establishment of a special benefit under the retirement system.

the retirement system should be such that he could be retired without great hardship. If the proposed reorganization or change is such that it will work peculiar injustices or will necessitate wholesale removals, it would seem as if the cases should be covered by special legislation, and if any special benefits are granted the present value of these awards should be appropriated by the special legislation, after they have been actuarially determined, and be paid to the retirement system for disbursement.

Special benefits in event of reorganization of office and abolition of position would be difficult to include in a sound system operated on the actuarial reserve basis, because reorganizations and abolitions could hardly be assumed to occur at any regular rate. They are sporadic, and then vary widely in extent. To a marked degree, however, they would need that control which comes from measuring in advance the full cost of the proposal. In the English service the question sometimes rose whether the savings that had been effected through the reorganization were not more than offset by the cost of the retirement benefits that had to be paid prematurely. One of the great merits of the actuarial reserve system is that

Actuarial
Difficulties

19,209 . . . "A transfer is a very good thing when an officer is called from one department on account of his special abilities and merits, to fill a vacancy in another department . . . But when one hears of these transfers it is mostly in connection with transfers of what are called redundant clerks in an office, people in an office from which work has been departing, and who then become redundant. There is no class of officer in the service for whom it is more difficult to find a place in another department than a redundant clerk. There is an essential difficulty in getting any good work out of such people, because the office from which they are taken naturally is very careful, if possible, to retain the best officers in its service that it can, and then such redundant clerks have probably got on a certain way in the service, and they look to be placed in as good a position in the department to which they go and that cannot very well be done without injuring the prospects of somebody in that department. The whole question of employing redundant clerks in this way seems to me almost quite hopeless and the heads of the different departments upon whom the responsibility for the administration very largely rests naturally discourage very much the idea of such transfers in any particular case where it occurs. We do not like it."

RETIREMENT OF PUBLIC EMPLOYEES

it results in a weighing of the cost, but it would hardly be applicable in providing for reorganization benefits.

**Conclusion
Against
Special
Benefits**

The general conclusion to be drawn therefore is apparently against attempting to weave a special benefit in event of abolition of office or reorganization into the complex net work of the system. The employee would receive, of course, the ordinary benefits granted on withdrawal, and if more seems desirable it could better be provided by special legislation and special appropriation with all the facts in view than by attempting to cover the almost infinite variety of possible cases by general legislation.

CHAPTER XIII

THE PRESENT EMPLOYEES

Scope of the Chapter. *Differences Between Present Employees and Future Entrants.* Differences in Homogeneity. Differences in Economic Relation to Retirement Systems. Differences in Period of Social Evolution. Differences in Desires for Benefits. Differences in Ability to Provide Benefits. Differences in Susceptibility to Moral Injury. *Division of Present Employees. The Present Employees Who Will be Retired Upon Adoption of the System.* The Contingencies to be Covered. The Superannuation Benefit,—the Cost of the Benefit. Division of Cost. The Conditions Upon Which Granted. Amount of Benefit. *Employees Continued After Adoption of System,—Benefits for Past Services.* The Contingencies to be Covered. The Superannuation Benefit,—The Cost of the Benefit. The Division of the Cost. The Conditions Upon Which Granted. The Amount of the Benefit. The Disability Benefit. The Cost of the Benefit. The Conditions Upon Which Granted. The Amount of the Disability Benefit. *Employees Continued After Adoption of System,—Benefits for Future Services.* The Contingencies to be Covered. The Superannuation Benefit,—The Cost of the Benefit and Its Distribution. The Conditions Upon Which Granted and Amount of the Benefit. The Disability Benefit. The Benefit in Event of Withdrawal. The Benefit in Event of Death. *Summary of Important Points.*

Scope of the Chapter. The problem of devising a retirement system for present employees is in many ways entirely distinct from that of planning one for future entrants. The preceding chapters of this book have dealt almost entirely with future entrants as they are the more important class in considering the permanent retirement provisions. The object of the present chapter is to present the more important differences between the two classes of employees and to discuss the effect of these differences in varying the principles that have been found to apply in the case of future entrants.

RETIREMENT OF PUBLIC EMPLOYEES

DIFFERENCES BETWEEN PRESENT EMPLOYEES AND FUTURE ENTRANTS

The Differences Enumerated

The principal differences between the present employees and the future entrants arise from differences (1) in their homogeneity, (2) in their economic relations to the retirement system, (3) in their period in social evolution, (4) in their desires for certain of the retirement benefits, (5) in their ability to provide or to assist in providing their own benefits, and (6) in their susceptibility to moral injury through the establishment of retirement systems.

Differences in Homogeneity. If the new entrants to any given branch of the service should be assembled each year they would obviously be a strikingly homogeneous class. They would have the common characteristic that they were new entrants that year with all that the fact implies. Though a few would doubtless vary rather widely from the average for the group, yet it would not be very difficult to describe a typical new entrant who would represent fairly accurately the class as a whole. The present employees cannot well be represented by a single individual as a type, because instead of being one class of entrants they are the survivors of all the different classes that have entered in the past fifty years or more, if the service has been established that long. In age they vary from the dean of the staff to the youngest junior; in service, from the old employee who entered as a boy to the employee the ink on whose appointment papers is scarcely dry; and in salary, from the lowest paid new entrant to the highest paid man in the service. Their economic and social position is no less varied. At one extreme is the patriarch who is being photographed as the great-grandfather in the four generations pictures and at the other is the young single man who has no idea of marrying. Among the women employees are at one extreme the elderly spinsters and the elderly widows and at the other the young things that one feels reasonably certain will not remain in the service for more

THE PRESENT EMPLOYEES

than a year or two. Clearly one can devise a system for the homogeneous class of new entrants with a feeling of certainty and definiteness which is entirely lacking when one attempts to deal with the heterogeneous class of present employees.

Differences in Economic Relation to Retirement Systems. The future entrants, as has been pointed out, regard the benefits under the retirement system as part of their compensation for services rendered; and the consensus of opinion among economists who have given thought to the subject appears to be that they are right in so regarding it, for irrespective of who pays the costs in the first instance fundamental economic forces over which the legislature has little or no control tend to place the ultimate incidence on the employees. The question of the economic nature of the retirement system for present employees cannot be so simply dealt with, because the employees are heterogeneous in respect to age and length of service. Consideration of the question can perhaps be simplified by recognizing two classes of service, namely (1) service rendered prior to the establishment of the retirement system, and (2) service rendered after its establishment; and by dividing the present employees into two classes, (1) those who will be retired immediately upon the adoption of the retirement system, and (2) those who will have to serve after the system has been established before they become eligible to retire.

The popular conceptions of retirement benefits as rewards for meritorious conduct, as charitable grants, or as pernicious illustrations of the special privileges enjoyed by government employees, have had their origin in the fact that in establishing retirement systems attention has generally been focused on the grants made to employees retired upon the initiation of the system in respect to services rendered prior to its creation. The aged employees themselves have generally appealed to the government to deal with them benevolently on the ground of their long service, their need, or the insufficiency of the compensation paid to them under the terms of their

Employees
Retired
upon
Adoption
of System

contract of employment; and in many retirement systems the grants to the employees retired soon after the creation of the system have been benevolent grants pure and simple. In fact, it may be laid down as a general conclusion that the grants to the employees who retire soon after the creation of the retirement system are benevolent grants, unless the system forces retirements, for example, by establishing a compulsory retirement age.

If the system forces retirements, the argument may be advanced that the payments made to the employees compelled to retire are in the nature of liquidated damages to compensate them for the changes made in the conditions of their employment. When they entered the service the general rule was, in all probability, that an employee would not be dismissed so long as he could fulfill minimum attendance requirements. The establishment of a compulsory retirement age changes this rule and provides systematically for the elimination of those of advanced age. A system with a compulsory age takes from a few the privilege of remaining on the active roll at full pay until advanced age, and as compensation, it may be argued, it pays a smaller amount for life to all who leave as superannuated, although some of them, in the absence of a retirement system, would have had to retire anyway and would have had nothing. It substitutes insurance for chance, and it may be said that the employees surrender their chance of long continuance on the active rolls in exchange for the insurance.

The merits of this argument can hardly be considered in a general discussion, because they would seem to turn on the facts in a particular case. If a low compulsory age were established in a service in which employees had formerly been universally retained as long as they could show color of attendance, it might have considerable weight, whereas if a high compulsory age were fixed so that few were actually driven out and most who left did so because they preferred to go, it would be almost entirely academic. To present the

THE PRESENT EMPLOYEES

argument has, however, seemed worth while, as it is the exception to the rule that benefits for past services to employees retired on the inception of the system are benevolent grants.

In trying to determine the economic nature of benefits for past services paid to employees who remain on the active rolls for a considerable period after the establishment of the system, another point has to be considered. Retirement systems generally provide that benefits in respect to past services shall be paid only on disability or on superannuation retirement, and that the employee shall forfeit all right to them in event of resignation. The value of these benefits for past services may be a considerable sum and may become a sort of economic anchor to keep an employee from drifting out of the service. In so far as it so operates it is compensation to the employee for continuous service. It is another factor tending to increase that economic inertia and possibly that economic ignorance which not infrequently keeps an employee in a position in which his salary is not the full equivalent of his earning capacity.

Benefits in respect to past services are therefore very difficult to classify economically, but although in certain instances the employee may have some ground for claiming them as a right, they undoubtedly have in them some of the elements of a gratuity.

Benefits in respect to the future services of present employees tend to become part of the compensation for services rendered and economic forces operate gradually to place the cost on the employees, whatever the provision of the law establishing the system. If the government gives a straight pension entirely at its own expense, its action is equivalent to raising the scale of wages. At the moment this new scale is adopted, the incidence of the cost is directly on the taxpayers; they pay more today than they did yesterday for the same service; but no sooner does the system go into effect than the incidence begins to shift. That the straight pension will retain men in the service who would otherwise resign is one

Benefits
for Past
Services of
Employees
Retained

Benefits
for Future
Services of
Employees
Retained

of the reasons for adopting it. In such cases the employee's consideration for remaining in the service is aggregate compensation, that is, immediate wage plus promised pension. Had not that employee been induced to remain by the pension, his resignation would have caused either a vacancy and a new appointment or one or more promotions and a new appointment. The men who might have been promoted have their free pensions, but they have not the salary which they would have received had there been no free pension, and some of the cost of retirement benefits has thus been shifted to them. The forces at work are complex in the extreme, but it would appear to be safe to draw the general conclusion that the moment retirement benefits become inducements for employees to remain in the service or for candidates to compete for positions in it, they tend to become part of the compensation.

Differences in Period of Social Evolution. The adoption of a retirement system may be regarded, to a certain extent, as a turning point in social evolution. Prior to the adoption of the system, the highly individualistic policy has been followed of paying an employee for his services solely in immediate wage and permitting him to manage his affairs for himself. The establishment of a retirement system marks the acceptance of the policy of paying partly in immediate wages and partly in retirement benefits. Whether the system be contributory or non-contributory, it is, in many respects, virtually a compulsory savings institution that requires that the savings be applied in a particular way. The future entrant, of course, will render all his services under this social régime, and can without difficulty adjust his personal affairs to dovetail into the provisions of the retirement system. The present employees, on the other hand, began their services under the highly individualistic régime, and their affairs are arranged on that basis. In dealing with new entrants it may be assumed that the field is clear and that no conflicts can arise, whereas with present employees no such assumption is permissible:

and, in fact, investigation would doubtless show that most present employees have already made some attempt to meet those contingencies of life against which the retirement system is designed to protect them. Two of the commonest devices used would probably be found to be the purchase of a house on the installment plan, and the purchase of life insurance, frequently with an investment feature attached. Investments of this type have not infrequently been preferred for the reason that they involve an element of self-compulsion; they require regular payments under penalty of a loss. The fact that such provision has already been made in numerous cases should be kept in view constantly in planning for present employees. It again indicates the necessity for treating the present employees and the future entrants as separate classes, and for regarding the system for present employees as a temporary device designed to furnish a smooth transition from a highly individualistic policy to the less individualistic one of compulsory saving.

Investments
of Present
Employees

Differences in Desires for Benefits. The individual future entrants, forming a homogeneous class with the future before them, to be lived under the compulsory savings régime of the retirement system, naturally desire practically the same benefits from the system. The individual present employees, forming a heterogeneous class, with all different proportions of their service lived under the individualistic régime, naturally desire very different benefits from the system. The present employee who is already of the age to be retired thinks only of the superannuation benefit, with possibly some provision for his wife should he die before she does or for his young child if he happens to be one of those numerically exceptional men who have young children at the time they reach the retirement age. Since such an employee has passed the age at which the question of being tied to the service is a matter of any consequence, he attaches little or no importance to a benefit in event of resignation; and as he has escaped dis-

missal he thinks a benefit on that contingency of no consequence. He is not at all beset by the fear of early death or of early disability. All that he needs, and consequently all that anybody needs, is suitable provision for himself and his dependents in his old age. As one passes down from the oldest present employee to the youngest one encounters a gradual change in view among those who have given thought to the subject of retirement benefits; and the youngest present employee will be like the new entrant in preferring reasonable protection against all the more important dangers of life to larger protection against superannuation and disability at the expense of no protection against death and dismissal and a forfeiture in event of resignation.

Differences in Ability to Provide Benefits. In considering the differences between the present employees and the future entrants in respect to their ability to provide their own superannuation allowances, it is important to distinguish clearly between the annual contributions or annual premiums which have to be paid toward accumulating the real cost of benefits and the real cost itself. The real cost of a superannuation allowance, for example, may be defined as that amount of money which must be in the superannuation fund in respect to each employee retired, at the moment of retirement, to permit the fund to pay the promised benefits in all cases. An actuary would define it, possibly, as the present value of an annuity of the amount of the superannuation allowance with first payment immediately. The contributions or premiums are those amounts which paid annually, or at other stated intervals, will, with compound interest, accumulate the real cost by the time the employee retires. The essential point is that the real cost of a superannuation annuity of a fixed amount with first payment at a fixed age is exactly the same, however long an employee may have been in the service.

The amount of contribution or premium which the employee, or the government in his behalf, will have to con-

THE PRESENT EMPLOYEES

tribute to accumulate the cost of an annuity of a fixed amount with first payment at a fixed age will turn, therefore, entirely on how long a time is to elapse between the date of the first contribution payment and the date of the retirement. If this period is long, the contributions will be comparatively small, for two reasons: (1) The number of installments paid will be high, and (2) the aggregate amount of interest earned will be large, because the early payments will have been at interest a sufficient time to increase perhaps five or six fold. One dollar paid in the first year of service will, because of interest, purchase as much superannuation benefit as four dollars paid about thirty-five years later, if the fund is operating on a four per cent basis on a savings bank plan. If the period between the first payment and the date of retirement is short, the rates of premium become prohibitive because the cost will have to be distributed over a small number of payments and none of these payments will have been on deposit a sufficient time to earn any considerable amount of interest.

High
Premium
for Benefits
for Aged
Employees

All present employees, with the possible exception of the very recent appointees, are therefore in an entirely different position from future entrants in respect to their ability to bear the cost of their own retirement. In the extreme case of the old present employee who is to be retired immediately upon the adoption of the system, the premium would be the entire real cost, several thousand dollars for an annuity of a few hundred.

Even if time were not against the present employees, it may be questioned whether socially and economically they are as well able as future entrants to pay even that contribution which would have been assessed against them had the system been in force when they joined the service. New entrants generally enter the service because the net salary, that is, the salary less any contributions to the system, is greater or has greater purchasing power than the remuneration of their former positions. In their opinion the position is the best they can get and they accept the retirement contribution more or less as a matter of course. Present employees have been

Inability
of Present
Employees
to Pay
High
Premiums

RETIREMENT OF PUBLIC EMPLOYEES

drawing their salaries free from any premium deductions and they have either permitted their standard of living or customary mode of life to come up to their salary or they have saved something. It is often said, more or less offhand, in discussing retirement legislation that to compel the present employee who is now spending all he earns to make provision for the future is a good thing. The fact indeed creates a presumption of thriftlessness, but the presumption is not conclusive. In some instances an employee has many dependent upon him and he is using his money, occasionally with almost extraordinary skill, in caring for them and in giving them an education. To him a demand for a premium means curtailing the advantages he is giving to his dependents. Anyone who has been close to the force of a large government office can generally recall cases in which employees have carried heavy burdens because of illness in their families, not only spending all they earned, but going into debt in addition. These persons win the respect and admiration of their fellow employees; and a quick assumption that a forced contribution would benefit them rouses opposition to the system.

If the employee has been saving it is frequently assumed that to change the character of his investments is a simple matter and it will be no hardship to him to require him to put his savings into the fund. But investments cannot always be changed without loss. Investigation would probably show that two of the commonest types of investments for government employees are life insurance with investment features and the purchase of a house on the installment plan. Not infrequently the surrender of an insurance policy involves loss, and real estate investments are notoriously inflexible.¹

¹ "One reason is given by teachers for preferring insurance to any other form of investment, and this reason has much to do with the fact that teachers have invested their savings to such a large extent in insurance. Many teachers write that they have taken out endowment policies for the reason that this involves an obligation for a regularly recurring payment either annually or semi-annually. The teacher thus places himself under an obligation which he cannot well

THE PRESENT EMPLOYEES

A statement of the amount of premiums or of contributions which the present employees will be called upon to pay in terms of a percentage of their salaries gives a mistaken idea of its importance to the employee. A contribution of only 5 per cent sounds small, but in the case of the man who has been saving 20 per cent of his salary it necessitates a reduction of over 6 per cent in his regular expenses or of 25 per cent in his payments on or toward investments. In the case of a man who has been saving only 10 per cent of his salary, it involves a reduction of 50 per cent in his annual payments on or toward investments unless he can curtail his expenditures. To get the true mental attitude of the present employees, standard of living must be thought of in terms of food, clothing for the family, and education for the children; and investments, in the terms of payments on the insurance policies and payments on the house. Not unnaturally many present employees find it difficult to see merit in a contributory system.²

Differences in Susceptibility to Moral Injury. The difference in the moral effect of a free pension on an older employee who has already nearly completed his service and the young

avoid. Without this definite fixed obligation a large proportion of teachers find that they would make no saving from income whatever. It seems clear from the tenor of many of these letters that the use of insurance as an investment, and particularly the preference for endowment insurance, is in no small measure due to the fact that this form of investment provides a means by which the teacher is not called upon for a large payment at one time, but under which he accepts an arrangement which compels him at regularly recurring intervals to set aside a part of his income which otherwise would not be saved at all."—"A Comprehensive Plan of Insurance and Annuities for College Teachers," by Henry S. Pritchett, Bulletin 9, Carnegie Foundation for the Advancement of Teaching, New York, 1916, p. 37.

²"To provide the entire fund (for past services) from assessments is so manifestly improper that it merits no consideration. To provide any part of it from such assessments is only in a less degree objectionable."—"Retirement Funds for Government Employees," by Roland P. Falkner, National Civic Federation, Annual Meeting, New York, 1909, Meeting 9, 1908, p. 189.

RETIREMENT OF PUBLIC EMPLOYEES

man just entering is manifest. One has lived his life free from the pension influence and comes upon the pension grant unexpectedly toward the end of life. The younger man receives the promise of retirement benefits at the outset of his career and he may permit the certainty thus assured him to purchase from him his freedom for development. He may cling to the position that promises him security long after it has ceased to give him anything besides salary and security.³

DIVISION OF PRESENT EMPLOYEES

The
Groups
Dis-
tinguished

Consideration of these differences establishes clearly at the outset that little progress can be made by thinking of present employees as constituting a homogeneous group. They must be subdivided into (a) those who will be retired immediately upon the adoption of the system, and (b) those who will be retained on the active rolls after its adoption; and the services of the second group can at times very conveniently be divided into (1) that rendered before the system was created, and (2) that rendered subsequently. In discussing the principles that apply in devising a retirement system for present em-

³ "At the inauguration of the Foundation the attention of the trustees and of the Founder was focused upon the aged teacher. His service and his need called for some humane and just method of dealing with the teacher whose usefulness had decreased by reason of old age. All the provisions of the pension rules as determined by the trustees looked toward the problem of the wornout or aged teacher and his dependents. Under these circumstances the effect that the establishment of a definite system of free pensions might have upon younger men was but little considered. No harm is done when through private philanthropy or by means of a college endowment the old, infirm teacher is provided with a competence during his declining years. It is, however, not so clear what the effect will be upon the man of twenty-five or thirty or thirty-five in holding out to him this expectation throughout his teaching career. To such a man the protection of a pension system as at present inaugurated is postponed to the distant future. The majority of these younger men will never enter into the possession of a pension, but the promise of it during thirty or forty years of their academic life will affect their relations in ways not so evident ten years ago."—"A Comprehensive Plan of Insurance and Annuities for College Teachers," by Henry S. Pritchett, Bulletin 9 of the Carnegie Foundation for the Advancement of Teaching, New York, 1916, p. 3.

THE PRESENT EMPLOYEES

ployees, it may perhaps help to make three distinct sections, the first concerning present employees already of the age to be retired; the second, the past services of present employees who will be retained on the active rolls after the establishment of the system; and the third, the future services of present employees, although in many retirement systems in existence no such distinctions have been recognized, and those between the second and third division are not infrequently almost purely academic.

In each of these three sections the first question to be considered is what contingencies shall be recognized as entitling to benefit. Each contingency to be provided for can then be separately discussed in so far as they demand any special consideration. In dealing with benefits for present employees the matter of cost and its distribution assumes a dominating position, and affects the conclusions to be reached on practically all other points, and hence under each benefit it is desirable to consider cost and contributions first before taking up the conditions upon which the benefits are to be granted, and the amount of the benefits, under which heading may be included the three familiar divisions (a) in relation to salary, (b) in relation to length of service, and (c) in relation to economic need.

The Order
of Dis-
cussion

Death and disability due to the actual performance of duty, it should be noted, are not mentioned in the following pages of the chapter, because it is assumed that whatever provisions are made in respect to benefits on these contingencies will be extended to all employees regardless of the time of their appointment and hence the discussion of these benefits presented in reference to future entrants is applicable to present employees.

THE PRESENT EMPLOYEES WHO WILL BE RETIRED UPON THE ADOPTION OF THE SYSTEM

The Contingencies to Be Covered. The present employees who are already of the age to be retired are interested in two

benefits only, (1) a superannuation allowance, and (2) a benefit in event of death soon after retirement. The superannuation benefit is, of course, the corner stone of the retirement system, and such a benefit must necessarily be granted if a system is established.

Since the present aged employees cannot pay the cost of their own retirement allowances, their benefits, as has been seen, partake of the nature of gratuities and such payments by the State are justified only in so far as the benefits are liquidated damages for removal from office, or payments for the purchase of a service-improving device. Neither of these grounds would seem to warrant the payment of a special life insurance benefit in event of death after retirement. The furthest which the government would be justified in going would be to have its actuary calculate the present value of the employee's superannuation allowance at the time he is retired, and permit him to elect whether he will expend this sum (1) for a life annuity, terminating when he dies, or (2) for a last survivor annuity on his own life, and that of some dependent, or (3) for an annuity on his own life with a certain number of payments guaranteed. The expense to the State would be the same, and the option would permit of the application of the State's payment in the manner believed by the employee best to meet his own needs and those of his family. Such a device makes the system more flexible and thus has much to commend it. In so far as possible a transitional system should permit the employee to adjust the benefits to meet the situation in which he finds himself.

The Superannuation Benefit—The Cost of the Benefit. The real cost of a superannuation benefit, as has been said, is the present value of an annuity of the amount of the benefit at the age of retirement with first payment practically immediately. In the case of the male New York school teachers, for example, the cost of a superannuation allowance beginning at age seventy of one dollar a year is \$6.76, and thus a

pension of \$600 would cost \$4,056 ($\$6.76 \times 600$); for female teachers the corresponding annuity value is \$8.04, and a pension of \$600 would cost \$4,824.⁴ These are the sums which would have to be in hand at the time the employees are retired in order to meet the claims as they fall due. It is assumed by the actuaries that the balance not yet required for paying claims is constantly at interest, and that the interest thus earned will help to carry the load. If no fund is established, and the claims are met as they fall due, the cost will be somewhat higher.

Division of Cost. The fact that a modest superannuation benefit with first payment at as late an age as seventy will cost several thousand dollars demonstrates very clearly the impracticability of calling upon the present aged employees to bear any considerable proportion of the cost. If it could be assumed that they had the required funds it would be unnecessary to establish a retirement system at all; the government could confine itself to selling annuities or it could arrange with private companies to sell annuities. It may be accepted as a well-recognized principle of retirement legislation that the entire burden of retiring present employees at or above the retirement age on the adoption of the system must be borne by the public.

The Conditions upon Which Granted. In the discussion of the system for future entrants the point has repeatedly been made that a difference in the age at which retirement takes place makes a substantial difference in the cost of the system to the government, because the cost of the individual annuities diminishes as age advances, as also does the number who will receive those annuities. One obvious procedure on installing a new system is to place the retirement ages at the outset at a very high point. In the section on the benefits to present

⁴ Report on the Pension Funds of the City of New York, Part II, by George B. Buck, New York (1916), p. 112.

employees for past services will be considered the question of progressively reducing the age conditions so that the ideal age desired for future entrants will not be enforced at the outset, but will be reached a considerable number of years after the installation of the system.

The danger of placing the ages at a high point is of course that some employees whose capacity is seriously impaired will be continued in the active service. This danger can be overcome through the provision of disability benefits, to be discussed in the next section, or through the inclusion of a provision that would permit the government to retire an employee if it so desired at an earlier age than those at which the employee is given the right to elect to retire. As applied to future entrants such a provision is apparently not desirable, but it does not appear to be objectionable as a temporary measure applicable to present employees.

**In Relation
to Salary**

Amount of Benefit. In planning a retirement system for future entrants, it will be recalled, the relationship between the amount of the superannuation benefit and the amount of salary raises that technically complex question whether in a service having a wide range of salaries the superannuation benefit should be related to salary, directly or indirectly. In the case of present employees already of the age to be retired, let it be said at the outset, the problem is one of technical simplicity. Since all the facts regarding past salary movements can be determined exactly, if the data have been preserved, it is entirely unnecessary to base any calculations on forecasts of the future or on averages; and since the benefits for past services are not compensation, the question of equities as between different employees and classes of employees does not become so acute. In dealing with present employees already of the age to be retired the question is simply, Is a relationship to salary desirable? If it is regarded as desirable it can be created in respect to past services by the simple device of direct relation, either to the terminal salary or one of its

variants or to the average salary throughout service. Where records are imperfect the average salary of the last few years is a desirable basis.

In thinking of the question of the relation of the amount of benefit to salary, it is convenient to assume that two employees are involved, both of whom entered the service at the average age for new entrants and served continuously to the same retirement age, and that one is in receipt of a fairly large salary and the other of a low wage. Should the amount of the superannuation allowance granted the two men in respect to their past service be the same, or should it be proportional to or related to their salaries? Except in so far as the allowance may be liquidated damages for loss of position, neither employee has ground to claim any allowance as a right. Should the government give a larger gratuity to one than to the other? The minimum of subsistence for the two employees is essentially the same amount and unless at least that amount is granted hardship may result. If a full minimum of subsistence is given to the lowly paid employee, should a larger sum be given the more highly paid man, or should it be assumed that since he has been drawing a high salary, he has made or should have made other provision, and that the responsibility of the government ends when it has so provided that he shall never be in actual want so long as he lives? It would seem as if the government had done its duty when it had provided that none of its present employees who have served it for a long period should ever be in actual want, but not infrequently retirement systems give benefits proportional to salary to present employees who are already at the retirement age. If such a procedure seems desirable care must be taken to set up a minimum below which no allowance shall go for a man who has served the government all his life; that is, account must be taken of the fact that the low-paid man requires a far higher percentage of his salary in order to be able to purchase the necessities of life than does the more highly paid man.

Very low-paid employees may present a special problem in some services if no relationship to salary is provided. If an employee has been receiving less than the minimum of subsistence as his active wage, should he be retired with a pension of a greater sum than he has been earning? If the salary has been low because the position required only part time service, the obvious answer is either that the amount should be reduced or else that the system should not extend to part time employees. If, on the other hand, the employee has been giving full time service, a rather interesting social question is presented which has too many ramifications to be considered here. If the decision is to make no distinction in the amount of the pension, and to give the employee a larger amount as pension than he has been earning as salary, the logic of the situation would demand the increase of the active salary of all such employees remaining in the service to at least the amount of the pension. Except as a distinctly temporary expedient retirement allowances that exceed active pay are socially indefensible.

Amount of
Benefit in
Relation to
Service

In discussing the question of the relation of the amount of the benefit to the length of service, it is convenient to assume that two employees are involved, each of whom is receiving the same wage, and that one has served the government since early youth and that the other has been improvidently appointed late in life. Should the government give the same retirement allowance to each or should it relate the amount to the length of service? The system for future entrants in a complex service should undoubtedly provide a relationship between length of service and amount of benefit, in order to offer the employees some inducement to remain until the compulsory age, and to give recognition to the fact that the young entrant must make all his provision for the future while serving the government, whereas the older entrant should have made some provision in the years prior to his entry. Since a relationship is to be provided for future entrants, it would probably be well to create one for the present aged employees.

Not without weight is the argument that he who has served the government all his life is entitled to more consideration than he who has served it but a few years.

If the decision has been in favor of a uniform grant of a minimum of subsistence to all employees who have served at least a given number of years, say, for instance, \$600 for all who have served forty years or more, and in favor of a proportional allowance to all who have served less than forty years, which in the case of this illustration would be \$15 for each year of service, a question would arise as to whether any minimum should be established below which no allowance should go. If an old man of 69 had been appointed just a year before the establishment of a system with 70 as the compulsory retirement age, should he be retired with an allowance of only \$15 a year? Clearly if he is dismissed in poverty, the government is responsible only in so far as it refuses to continue an employment contract which should never have been entered into, unless the facts of the case were exceptional. The poverty is largely the result of what the employee did or failed to do prior to the establishment of the system. The government might, it would seem, make the assumption that the employees who have come to it late in life have made some provision in their earlier years and hence it provides for them only in respect to those years in which they serve it. Exceptional cases of hardship and distress will be left to the charitable agencies of the community, both public and private, in preference to establishing the system on the basis that all late appointees have been improvident persons who must be given a large gratuity through the government system.

The economic needs of the present aged employees are in all probability essentially the same as the needs of the future entrants. The difference between the two classes arises from the fact that the present aged employees have rendered their full term of service under a system which placed full responsibility for meeting these needs on them personally, whereas

The Amount
of the
Benefit in
Relation to
Economic
Need

the future entrants render all their service under a system of compulsory savings. To compel an employee to save for the necessities of his standard of life in his old age is a very different matter from giving him in his old age, over and above any other provision which he may have made, the full amount required for the necessities of his standard. Large benefits to present aged employees cannot in fact be justified by the same arguments which can be advanced in the case of the future entrants. The weight of the arguments would in fact seem to favor for present aged employees who have served the government throughout their active career, a grant of a uniform pension of approximately the minimum of subsistence without regard to salary.

EMPLOYEES CONTINUED AFTER ADOPTION OF SYSTEM:
BENEFITS FOR PAST SERVICES

The Contingencies to Be Covered. In the interests of the government, the retirement system will have to allow to present employees continued on the active rolls after the installation of the system benefits in respect to past services in event of disability and of superannuation. Since these benefits are not part of compensation withheld from payment at the time the services were rendered, the employee is not entitled to any payment in case of death in the active service, dismissal or resignation, unless he contributes toward the cost of the benefits; and it is doubtful if the government is justified in making any allowance from the public treasury in respect to past services in event of these contingencies.

The Superannuation Benefit—The Cost of the Benefit. In providing benefits for past services for employees who are continued on the rolls after the system is established, the obvious practice is to consider length of service in one way or another. To the young present employee only a very small allowance will be promised on retirement because he has served but a short time, whereas to the older present employee of long

THE PRESENT EMPLOYEES

service a far larger amount will be promised. The cost of the benefit will, therefore, depend in each individual case, to a considerable extent, on the length of time the employee has served.

The Division of the Cost. The feasibility of dividing the cost between the employees and the government, if such a procedure seemed desirable, would turn on two points, the age of the employee at the date the system went into effect, and the number of years of prior service. The very young present employee could conceivably be assessed for a considerable part of the cost of any benefits in respect to past services because the amount of such benefits would be small and payment could be made in many small installments distributed over a long period. The older present employees with long service could not possibly bear an equal proportion of the cost of their own retirement benefits in respect to past services, because the cost of these benefits would be much larger and the period in which this cost could be accumulated would be much shorter. It follows, therefore, that if any part of the cost of benefits in respect to past services is to be assessed against the present employees, the amount of the assessment must depend on what the employees can reasonably bear and not be any fixed proportion of the total cost or of the premiums which would be required to meet that cost.

In discussing the differences between the present employees and the future entrants it was pointed out on page 296 that the ability of the present employees to bear assessments is less than that of the future entrants. To compel them to purchase benefits in respect to past services may occasion them serious loss and much hardship. If the government finds that it cannot afford to pay the full cost of that superannuation benefit in respect to past service which it regards as socially and economically desirable, consideration should be given to the possibility of having the government promise unconditionally such benefits in respect to past services as it can afford to pay for,

and to allow each employee the privilege of electing whether or not he will contribute for a benefit in addition to that promised by the government. This question will be further considered in the section dealing with contributions from present employees in respect to future services. (Page 320.)

The Conditions upon Which Granted. The actuary can determine in the case of any individual employee the amount which would have to be in hand at the present moment, invested at a given rate of interest, in order to accumulate, by the time the employee reaches the retirement age, the cost of his benefit in respect to past services. This amount may be termed the actuarial deficit in respect to past services, and it is a convenient figure to have in mind in considering the question of the conditions upon which the superannuation benefit shall be granted for past services. This deficit in the case of employees already near the compulsory retirement age is, of course, generally large, because the employees have, as a class, had long service and will be retired shortly, whereas in the case of the more recent appointees, the deficit is small because they have had short service and will not as a class be eligible for retirement for a long period. The amount of the deficit will, of course, be affected by the age fixed for retirement, being considerably reduced by advancing the compulsory age.

The Pro-
gressively
Diminishing
Superannua-
tion Age

The suggestion of a progressively diminishing series of age conditions for superannuation retirement would seem to merit attention in considering benefits to present employees who will be continued in the service after the adoption of the system. If the system devised for future entrants permits superannuation retirement at 60, and makes it compulsory at 65 with retention in exceptional cases to 70, the proposal is that on the installation of the system these ages, in so far as the employees are concerned, shall all be advanced, say 5 years, so that retirement is permitted at 65 and required at 70 unless the case is exceptional, and then the employee may be retained

until 75. On each successive quinquennial anniversary of the establishment of the system the age conditions will be reduced by one year until at the end of 25 years they reach those established for future entrants. Each present employee, of course, knows at once what conditions are to apply to him. Those who are under 40 years of age know that the compulsory age in their case is 65, those between 40 and 45, that the age in their case is 66, and so on.

The principal advantages of the progressively diminishing superannuation age are that it enables the initial compulsory retirement age to be placed high without seriously diminishing the ultimate good which the government is to derive from the system, and it takes cognizance of the fact that superannuation benefits can be provided more easily for young present employees than for older ones. A high compulsory age, moreover, eliminates much of the hardship that has its origin in compulsory retirement, because it markedly reduces the number of employees who will be dropped from full active pay to small pensions on the inauguration of the system, without any warning. Notice of a few years enables the employees to make preparation. The high age also reduces the actuarial deficit in respect to present aged employees, and is desirable from that point of view. Since it reduces the hardship it may also permit the payment of somewhat smaller benefits than would seem just if the employees were retired without warning at a younger age. The young employees will have the opportunity to add to their allowances for past services their allowances for future services, which, as they will be part of the compensation, can well be made more adequate, and hence they can be compelled to retire at a younger age.

The Amount of the Benefit. In providing a benefit in respect to past services for present employees who will be retained after the establishment of the system, the founders will probably choose between one of three general types of devices:

In Relation
to Salary

RETIREMENT OF PUBLIC EMPLOYEES

1. An annuity of a certain fixed amount for each year of service, payable at retirement.
2. An annuity of a certain fixed proportion of salary for each year of service, payable at retirement, or
3. A credit on the employee's superannuation account of that amount which it would now contain had a deposit been made to it each year of a certain proportion of the employee's salary, and the whole invested at interest, said credit to be available on superannuation retirement for the purchase of an annuity.

The second device, it will be seen, establishes a definite relationship between the amount of the benefit and the amount of the salary. Although it would be entirely feasible to base the calculations on the salary already earned in the past, and thus to make the liability incurred a sum certain, the practice is generally to base it either on the terminal salary, or one of its variants, or on the average salary throughout service. This procedure is open to some of the objections that were advanced in respect to relating the superannuation benefits for future employees directly to salary. The amount of the liability for benefits in respect to past services thus fixed will be more or less contingent on future changes in salary. Administrative reforms may be impeded by that fact. Inequities between employees may also arise to some extent if the employees contribute for benefits in respect to past services. For these reasons the first or the third devices would be regarded as preferable by those who advocate savings and annuity systems. If they desired a relationship to salary they would select the third device, or if they felt that it was unnecessary they would select the first.

In a savings and annuity system, it should perhaps be noted, it would be entirely feasible to distinguish sharply between benefits in respect to past services and benefits in respect to future services, and to have the benefits in respect to past services a fixed sum per year of service, and the benefits in respect

THE PRESENT EMPLOYEES

to future services of present employees indirectly dependent on salary through the process of basing deposits in the superannuation fund on salary and basing the amount of benefit on the purchasing power of these accumulations.

The amount of the allowance for past services of present employees who will be continued on the rolls after the establishment of the system must obviously be related to the length of that service.

In Relation
to Length of
Service

Employees who entered the service of the government at an exceptionally early age constitute a rather interesting problem in this connection. To illustrate it, let it be assumed that present employees who are already of the age to be retired are to be granted an annuity of \$15 for each year of service, with a provision that in no case shall the annuity exceed \$600, or, in other words, that in no case shall more than 40 years of service be considered, and let it be further assumed that the proposal is to give similar allowances to present employees not yet of the age to be retired in respect to their past services. An employee who had entered the service as a messenger boy at the age of 15, and who is now 55 years of age, would then be entitled to the maximum of \$600 in respect to past services, although he still has 15 years to serve before reaching the compulsory age, and will acquire further allowances in respect to that service. Similarly if one and one-half per cent of salary is to be allowed for each year of service with a maximum benefit of sixty per cent, this particular employee, although only aged 55, would already be entitled to the maximum.

Treatment
of Early
Entrants

An obvious remedy for such a situation is to adopt a rule that no services rendered before a given age shall be counted in awarding benefits for past services, but such a device is in many ways arbitrary. If 30 years is adopted as the limit, the employee who entered at 30 and has served a year gets an annuity in respect to that year of service, whereas the man who entered at 29 and has served a year gets nothing. A more satisfactory device would appear to be to adopt a scale of

RETIREMENT OF PUBLIC EMPLOYEES

allowances for each year of past services of present employees who will be retained after the establishment of the system, according to which the exact amount of the allowance, per year of past service, will be determined by the age of the employee on his entrance into the service. The procedure in developing such a scale would be (a) To decide upon what may be regarded as a standard entrance age for the service, (b) to decide what would be the proper annuity to have paid an employee who had entered at that standard entrance age, and at the time of the establishment of the system was exactly at the compulsory retirement age, (c) to divide the amount of the proper annuity so decided upon by the number of years which must elapse between the standard entrance age and the compulsory retirement age and thus to secure the standard rate to be allowed per year of past services to those who entered at or above the standard entrance age, and (d) to divide the amount of the proper annuity decided upon by the number of years between the compulsory retirement age and each entrance age below the standard to determine the rate to be allowed for each year of past service to those who entered the service at any specified age under the standard age.

Possibly two examples will make the suggestion clearer, one using the fixed allowance, and the other the proportion of salary :

EXAMPLE I.

70 years	=	compulsory superannuation retirement age
30	"	= standard entrance age or normal entrance age
40	"	= amount of service to be rendered before payment of maximum benefit for past services is regarded as warranted
\$600 = maximum benefit to be granted in respect to past services		
\$600 ÷ 40 = \$15, standard amount to be allowed for each year of service to all who entered at 30 or over.		
70 years	=	compulsory superannuation age
20	"	= age at entrance of earliest entrant among present employees
50	"	= service earliest entrant will render before 70

THE PRESENT EMPLOYEES

$\$600 \div 50 = \12 , allowance per year of past service for employees who entered at 20 years

The amount of allowance for each year of past service to employees having entered under 30 would be similarly found.

EXAMPLE 2.

70 years = compulsory superannuation retirement age

30 " = standard entrance age or normal entrance age

40 " = amount of service to be rendered before payment of maximum benefit for past service is regarded as warranted

60 per cent of salary = maximum benefit to be granted in respect to past services

60 per cent $\div$ 40 = 1.5 per cent standard proportion of salary to be allowed for each year of past services to all who entered at 30 or over

70 years = compulsory superannuation age

15 " = age at entrance of earliest entrant among present employees on staff

55 " = service earliest entrant would have to render before reaching age of 70

60 per cent $\div$ 55 = 1.09+ per cent = allowance per year of past services for employees who entered at 15 years.

If the more elaborate device of crediting the employee's superannuation account with the amount it would now contain had certain deposits been made in it annually is adopted, the percentage of salary deposited would be made the same for all who entered at thirty or over and that for entrants below thirty would be so reduced that it would provide the maximum desired proportion of salary as a benefit at the compulsory age.

Benefits in respect to past services, as has been seen, partake of the nature of gratuities, and although they may in some instances become the consideration that retains an employee in the service, few employees could pay for them by deductions from their current earnings. They must come from the taxpayers. They are not, moreover, grants to take

In Relation
to Economic
Need

RETIREMENT OF PUBLIC EMPLOYEES

the place of the individual's private provision for himself, as are the benefits for future entrants in a comprehensive system; they are merely grants to supplement the provision already made privately. The standard benefit would seem to be, therefore, the minimum of subsistence for a present employee who entered at the average age and served to the compulsory age. Benefits per year of past service would be calculated from this standard in the method just described. Such an arrangement is, however, perhaps naturally unpopular with the more highly paid employees who seek a benefit proportional to salary which will give them more nearly the necessities of their standard of life, but it is difficult to see how large benefits in respect to past services are to be justified, since the employees have already supposedly been paid in full for their work. The rule should apparently always be low benefits for past services.

The Disability Benefit—The Cost of the Benefit. Disability insurance, it will be recalled, is essentially different from superannuation insurance, because it does not require the accumulation of so large a reserve. If a thousand employees should enter the service in youth and remain to the compulsory superannuation age, they would make no demands on the superannuation fund for years and then they would all come upon it more or less in a body. Disability is entirely different. The disability fund is always under a load, which is heavier at some ages than at others, but it never has to carry any considerable fraction of the employees. To provide disability protection for the present employees is, therefore, not a difficult matter, but the disability system for them must be made to harmonize with the superannuation system developed for them and with the system for future entrants.

The Conditions upon Which Granted. Present employees who are retained after the adoption of the system should be subject to the same rules regarding proof of disability that are

THE PRESENT EMPLOYEES

prescribed for future entrants. If a progressively diminishing superannuation age is adopted it would doubtless be expedient to keep the permissive retirement age always the same number of years below the compulsory age, and require any employee who desired to retire in the ages between the permissive age in force at the time and the permissive age as established for future entrants to prove actual disability.

The Amount of the Disability Benefit. Since both the superannuation system for present employees and the entire system for future entrants have to be considered in working out the disability benefit in respect to past services, it will perhaps be best to describe briefly two possible solutions of the problem.

If future entrants have been promised superannuation and disability benefits directly proportional to salary, the same proportion of salary is generally allowed for each year of service, whether the employee is superannuated or disabled. Benefits to present employees for past services under such a system are likely to be proportional to salary also, and again the distinction between a superannuation benefit and the disability benefit lies only in whether proof of disability is required. The disabled present employee would get the same allowance for his past services as he would have received had he continued to the superannuation age.

If the system for future entrants has been devised to give equality of return and equality of protection, the amount of the superannuation benefit for future entrants will be based on the purchasing power of accumulations from contributions proportional to salary, and the disability benefit will be possibly the annuity which this accumulation will purchase for the employee at the age when he is disabled plus a special disability insurance of an annuity of a fixed sum. Present employees who are continued in the service after the adoption of the system would in all probability be insured for the annuity of the fixed sum, and would have a superannuation

RETIREMENT OF PUBLIC EMPLOYEES

account in respect to future services. In case of their disability they would be granted (1) the annuity of the fixed sum, (2) the annuity which their accumulations in respect to future services would purchase, and (3) the annuity which could be purchased by the present value, at their age when disabled, of the benefits promised to them in respect to past services.

EMPLOYEES CONTINUED AFTER ADOPTION OF SYSTEM

BENEFITS FOR FUTURE SERVICES

The Contingencies to Be Covered. Benefits in respect to future services, as has been noted, tend to become part of compensation and hence the present employees who continue in the service after the adoption of a retirement system have equities in these benefits which they do not have in benefits for past services. The older present employees are not of course much concerned over such equities, as the value of their benefits in respect to future service will be comparatively little, and the chances of their wishing to resign to enter other work are comparatively slight. To the younger employees, on the other hand, these equities are practically of the same importance that they are to future entrants, and they will wisely seek to have recognized their claims to benefits in event of early death, resignation or dismissal, as well as in event of disability and superannuation.

To permit of recognition of this difference between the older and the younger present employees, it might prove feasible to allow the present employees who will remain after the system is established to choose, in each individual case, whether the premiums paid for benefits, either by themselves or by the government, shall be used for the purchase of larger superannuation and disability benefits with forfeitures in event of death or withdrawal or whether they shall be used for the purchase of smaller superannuation and disability benefits with no forfeitures. Possibly it might be wise to establish an age limit below which an employee would not be permitted

THE PRESENT EMPLOYEES

to elect to forfeit, so that a barrier against dismissals and forced resignations would not be created in the case of comparatively young men. If comparatively small benefits are granted in respect to past services the older employees would doubtless be anxious to supplement the superannuation and disability benefits to the greatest possible extent, and they may already have protected themselves against death through life insurance.

The Superannuation Benefit—The Cost of the Benefit and Its Distribution. The method to be followed in distributing the cost of the benefits in respect to the future services of present employees will probably depend very largely upon the type of system adopted for future entrants. Since the younger present employees and the future entrants will doubtless fairly soon be brought into parallel positions it is highly important that the schemes for the two should be closely correlated, so that neither class can point to the other and say to the government, "You are doing far more for them in respect to current service than you are doing for us."

If the system devised to provide superannuation benefits for future entrants is designed on the savings and annuity plan to give equality of return, and if the contributions made by the government are alike for all employees, either the same amount or the same percentage of salary, the obvious procedure is for the government to make exactly the same contribution for each present employee as is made for each future entrant.

Under
Savings
and
Annuity
Plan

If the savings and annuity system devised varies the amount of the deposit according to the age of the future entrant upon appointment, and if the government pays half of the required deposit and the employee half, the situation becomes more complicated, because the standard of equal pay for equal work is more or less abandoned. Two possible courses would seem to suggest themselves, (1) that the government pays that amount or at that rate which it would have paid had the

RETIREMENT OF PUBLIC EMPLOYEES

system been in force at the time the appointee entered the service, or (2) that it pays the amount or at the rate it would have paid had the employee been a new entrant at the date the system was established. If the government makes a reasonable allowance in respect to past services the first of these courses would seem the more advisable. The government could then say to its present employees and to its future entrants, "We have taken care of past services as an entirely separate and distinct matter; in respect to future services we are treating all employees just as they would now be treated had the system been in force always."

Under
Plan
Basing
Benefits
Directly
on Salary

If the system devised for future entrants bases the amount of the superannuation benefit directly on salary, and the system for present employees is to follow the same course, the distinction between the past services and the future services of the present employees becomes mainly academic. The practical course is probably to establish two distinct systems, one for present employees, and the other for future entrants. The system for future entrants would provide comparatively large benefits in event of the several contingencies and would require fairly large contributions from the employees whereas that for the present employees would not cover all the contingencies, would grant smaller benefits, and would not require such large contributions, although it might give the employees the option of contributing to secure additional benefits. The difference in the size of the benefits granted and in the contributions required by the two schemes would in all probability tend to prevent one class of employees from feeling that the other had the better of it.

Enforced
Contribu-
tions

The question of forcing present employees to contribute toward the cost of the benefit demands careful consideration, whatever type of system may be adopted. Unless salaries are raised at the time the system goes into effect present employees will in some instances encounter a great deal of inconvenience and possibly actual hardship if they are called on to pay contributions. The ideal course apparently would

THE PRESENT EMPLOYEES

be for the government to offer unconditionally to the present employees such benefits as it can afford and thinks desirable to give for past services and to give unconditionally in respect to future services the same benefits or contributions toward benefits that it proposes to give at its own expense to future entrants, and then to permit the employees some choice as to whether they will themselves contribute toward additional benefits.

The extent of this option may be limited by the rules or the employees may be left absolutely free to use their own discretion. The London County Council Superannuation and Provident Fund Act permitted the employees to remain outside the scheme if they proved annually that they were making privately sufficient provision to protect themselves, and a similar clause might well be included in rules of the systems for present employees, many of whom will already have investment of some kind. Another possible device is to recognize that the creation of a retirement system will result in many promotions and to make the employees contribute for additional benefits in the event of promotion. If the system is operated on the savings and annuity basis a great deal of latitude may be given the different employees because each would probably have his own individual account. To simplify salary paying, all would probably be required to accept the same fraction of salary each month, enough less than one-twelfth to leave a balance due which would cover the amount of the larger contributions. Quarterly or semi-annually the balance remaining after the authorized contributions have been deducted would be paid to the employee.

The Conditions upon Which Granted and the Amount of the Benefit. The foregoing discussion of the cost of the superannuation benefit and the section dealing with the past services of present employees continued after the adoption of the system contain the general points that one would make regarding the conditions upon which the superannuation bene-

RETIREMENT OF PUBLIC EMPLOYEES

fit would be granted and the amount of the benefit for the future services of present employees.

The Disability Benefit. The disability benefit in respect to future services of present employees has also probably been sufficiently discussed in the preceding section.

The Benefit in Event of Withdrawal. In a system operated on the savings and annuity basis, the employee who is dismissed or who resigns would be granted (a) all his own contributions, except those consumed in disability insurance, and (b) under an ideally social system, such contributions as have been made by the government in respect to the service which he has rendered subsequent to the establishment of the system. If the benefits are made proportional to salary the employee would receive his own contributions and the actuarial reserve which has been accumulated to provide his benefits in respect to future service or its equivalent.

The Benefit in Event of Death. The benefit in event of death would be essentially the same as the benefit in event of withdrawal.

SUMMARY OF IMPORTANT POINTS

Present employees are not a homogeneous group and must be divided into those who will be retired immediately upon the adoption of the system, and those who will be continued after the system has been installed. In dealing with this latter group service rendered prior to the installation of the system must be distinguished from subsequent service.

The present aged employees who will be retired immediately cannot pay any of the cost of their benefits. The government must provide such benefits gratuitously as the cost of securing a service-improving device.

The present employees who will be retained after the establishment of the system cannot as a class pay any considerable part of the cost of their benefits in respect to past services.

THE PRESENT EMPLOYEES

Any payments which they may be required to make must be based on their ability to bear the burden. The ideal course would be for the government to give free without condition such benefits as it can afford and thinks wise, and to permit the employees to exercise an option in each individual case as to whether they will contribute to supplement these benefits. The same course would apparently be wise in respect to future services of present employees, possibly with some limitations.

Since the government must bear the cost, and since benefits for past services partake of the nature of gratuities, the cost must be kept down (a) by providing benefits in respect to past services only in event of superannuation and disability, (b) by establishing rigid conditions for granting benefits with high initial compulsory superannuation retirement ages, and (c) by reducing the amount of the benefits granted to a standard of the minimum of subsistence to be paid only for service from the ordinary or standard entrance age to the compulsory retirement age, and by granting proportional benefits for shorter service.

Rigidly reducing benefits in respect to past services is socially justifiable because the benefits are to supplement the provision which the employee has already made privately, and not to take the place of such provision. This difference between the purpose of benefits for present employees in respect to past services and the purpose of benefits for future entrants necessitates the use of a different scale of benefits for the two classes.

Benefits for past services should be related to length of service. In case an employee is forced out by the compulsory retirement age after very short service, the system should assume that he has made private provision in the period before he was appointed. Exceptional cases of hardship can be cared for temporarily by some form of public relief. Such a procedure seems preferable to making large charitable grants for short service without reference to the need.

The weight of the argument is apparently against any rela-

RETIREMENT OF PUBLIC EMPLOYEES

tionship between the amount of the benefit for past services and the amount of the salary. The fixed allowance, per year of service, alike for all, with possible exceptions in the case of very early entrants and very low-paid employees, would seem to be the preferable device for present employees.

The system for present employees must be recognized as temporary and transitional and should be entirely distinct from the comprehensive adequate system devised for future entrants.

CHAPTER XIV

THE ACTUARIAL RESERVE PLAN VERSUS THE ASSESSMENT OR CASH DISBURSEMENT PLAN

The Difference Between the Two Plans. The Disguised Assessment of Cash Disbursement Plan. *The Merits and Defects of Assessment or Cash Disbursement Plan.* The Two Merits. The Four Defects. *The Merits and Defects of the Actuarial Reserve Plan.* The Four Merits. Defects Can be Overcome.

THE DIFFERENCE BETWEEN THE TWO PLANS

In respect to the time at which the money to meet obligations is raised, retirement system may be operated in two general ways, (1) on the assessment or cash disbursement basis, and (2) on the actuarial reserve basis. Under the pure assessment or cash disbursement plan, no fund is established and all benefits are paid annually as they fall due from the current revenues of the government. If contributions are collected from the employees they are simply included as general revenues and are immediately paid out. Under the actuarial reserve plan a fund is established, and at regular intervals, generally on pay days, is turned over to the fund a sum which broadly speaking will be sufficient with the compound interest it will earn to pay for all the benefits which will ever fall due as the result of the services rendered during the period covered by the payment. All the money coming in on account of the retirement system is invested at interest and all benefits are paid from this fund.

Three distinct differences between the two systems should be clearly recognized.

1. Under the actuarial reserve plan the taxpayers who receive the service pay all the obligations incurred by the government in respect to that service; whereas under the assess-

The
Two Plans
Described

Important
Differences

In Respect
to Tax-
payers
Who Bear
Burden

RETIREMENT OF PUBLIC EMPLOYEES

ment or cash disbursement plan the taxpayers at the time the service is rendered pay the immediate wage only and leave for some future taxpayer the payment of the prospective benefits which have accrued in respect to that service. Future taxpayers under the assessment or cash disbursement plan pay the immediate wage for the services rendered them and the retirement benefits which mature in their day in respect to services rendered a prior generation. Under the cash disbursement system the generation establishing the system escapes with little or no payment and passes the burden to the future, whereas under the actuarial reserve system each generation pays its share.

In Respect
to Interest

2. Under the actuarial reserve system, the money available for payments has come in part from taxes and in part from the interest earned by this money in the time between its collection and its disbursement, whereas under the assessment or cash disbursement plan all the money comes directly from the taxes and no interest is earned because practically no time elapses between the collection of the money and its disbursement.

In Respect
to Proportion
Between
Salaries
and
Payments

3. Under the actuarial reserve plan the amount required from the taxpayers annually for the retirement system bears practically a fixed proportional relationship to the sum raised for the immediate wages of those in the service, whereas under the assessment or cash disbursement plan the proportion between the amount required for retirement benefits and the amount required for wages is for several generations constantly increasing.

The Disguised Assessment or Cash Disbursement Plan.
The three differences just cited are the principal ones distinguishing a true actuarial reserve system from a true cash disbursement or assessment system. Unfortunately in studying retirement experiments one frequently encounters a system that was founded in the belief that it would operate on the actuarial reserve basis, but this belief was based on faith and

ACTUARIAL RESERVE VS. ASSESSMENT

not on actuarial science. Such systems are the curse of the retirement problem. Their history is somewhat as follows: Provision is made for the payment into a fund of a small proportion of all salaries and from the fund thus created retirement benefits are to be paid. In the early days the amount in the fund grows rapidly, as almost all those who were in the service when it was created are paying into the fund and practically none are retiring. At this stage the fund is fortunate if it escapes successful demands for increased benefits claimed because the fund is so prosperous.¹ After the lapse of a good many years, perhaps fifteen or twenty, the number of living beneficiaries of the fund become so great that the annual contributions are no longer sufficient to pay the benefits and resort must be made to the accumulated funds. Increasing demands gradually wipe out the entire reserve and the system faces as alternatives (1) continued operation on the assessment or cash disbursement basis or (2) reorganization on the actuarial reserve basis. The essential difference between this apparent actuarial reserve scheme and a real actuarial reserve scheme is that under a real actuarial reserve scheme the fund grows and grows until a point is reached, many, many years after its establishment,² when the number

The
History of
Disguised
Assessment
Schemes

How Dis-
tinguished
from Real
Actuarial
Reserve

¹ For a striking illustration of the tendency to increase benefits because of the growth of the fund, see the Report of the Committee of the Board of Trade in Railway Superannuation Funds (British Parliamentary Papers, 1910, Vol. 57, especially page 6). The managers of the funds were misled, in some cases by their accountants, into the belief that the actuaries had been over-cautious and that the growth of the reserve showed that larger benefits could be paid. One fund that stuck to its original actuarial plan remained solvent, while the others that ignored the advice of the actuaries got into grave financial difficulties.

² The following extract from the testimony of Mr. George F. Hardy, then President of the Institute of Actuaries, answers simply a common question:

"I have often wondered why it takes so long as eighty years to get a stationary condition; could you briefly explain that?—It depends upon the greatest length of life to which any of the entrants can attain. The entrants come in at the age of eighteen and it is possible, according to the Mortality Table employed that they should live to one hundred or so, and if you have a sufficiently large number to deal

RETIREMENT OF PUBLIC EMPLOYEES

of pensions reaches a stable maximum, when the number of new pensioners each year is approximately offset by the number who die and when the annual contributions to the fund and the interest earned by the fund will meet all daily demands for payments. Under a true actuarial reserve fund, the fund itself is never exhausted unless the entire system is wound up and abolished. In a service of uniform size, the fund grows to its maximum and remains at that point. Necessity for diminishing the size of the reserve fund in a growing or stationary service is generally an early indication of approaching insolvency. Such funds must be classed as assessment or cash disbursement plans, however much their true nature may be disguised by the appearance of an actuarial reserve. To operate a system on an actuarial basis requires scientific computations, as will be discussed more at length in the following chapter.

THE MERITS AND DEFECTS OF ASSESSMENT OR CASH DISBURSEMENT PLAN

The Two Merits. The cash disbursement or assessment plan is not without its advocates. The two principal arguments in its favor are that it is simple and it is safe. Nothing could be more simple than promising all employees certain benefits and paying them when they come due out of the current revenues of the government. No elaborate collecting and investing machinery is required, and no nice actuarial computations and valuations are needed. It has all the pleasing simplicity of a charge account. The money to pay the claims in respect to present service is left, moreover, in the hands of the taxpayers until it is needed where the government assumes no responsibility for it. If the government collected it, it would be responsible for loss through mismanage-

with you may have some reaching that age. Eighty years added on to age eighteen brings you to age ninety-eight, which for practical purposes we may consider the limit of life."—The Report on the Board of Trade Committee as Railway Superannuation Funds, British Parliamentary Papers, 1911, Vol. 29, Pt. I, p. 207, q. 5541.

ment, bad investment and the other obvious dangers of a large fund.

The Four Defects. Against the assessment or cash disbursement system four principal objections are raised.

1. It is unbusinesslike and conducive to extravagance. Unless actuarial computations are made to determine what obligations are being incurred in respect to the services that are being rendered, no one knows what the real cost of these services is.³ That purchasing services without knowing what they will cost is bad business practice scarcely admits of argument. The fact that the cost of the benefits under the system is not definitely known makes it easier for the employees in the early days of the scheme to succeed in getting benefits increased. The immediate cost of too generous legislation under an assessment or cash disbursement system is so small that no one is disposed to offer much opposition to the employees' demands, and it is only after the lapse of a good many years that the true cost of the proposal becomes apparent and then vested rights have arisen. This defect of the assessment or cash disbursement system can, however, be overcome by establishing what is sometimes called "a paper fund."

Unbusiness-
like and
Conducive to
Extrava-
gance

If the system is operated on the paper fund basis all the actual money transactions are conducted just as they would

The Paper
Fund
Method of
Overcoming
the
Objection

³ "20,398. That leads me to ask you whether you attach importance to creating such a fund or whether you would be of opinion that it would be sufficient that the fund should be merely a paper fund?—I would sooner create the fund. 20,399. Create a real fund?—Yes, I think the minds of statesmen, the chancellors of the Exchequer and of the Government, have considerably changed within the last thirty years in that sense. Thirty years ago the idea was to have no funds; to pay everything into the Exchequer as it came. The consequence was that neither Minister nor head of a department, nor clerk ever watched the working of any scheme. The evil of not watching the working of a system has come forcibly home of late years, and our tendency now is to favor in any scheme of this kind the creation of a fund."—Sir R. E. Welby, of the Treasury, Second Report Royal Commission Civil Establishments; British Parliamentary Papers, 1888, Vol. XXVII, p. 403.

be in a system operated on the assessment or cash disbursement basis, but all the computations are made that would be required in operating a fund on the actuarial reserve basis. Each year the government is charged on paper with the amount which it would have to pay had a real fund been in operation, and the employees are credited with all their contributions, although as a matter of fact the contributions pass into the current revenue. The paper fund cannot of course earn interest and so a uniform rate of interest is assumed. Thus operated the system is subject to accounting control, but it costs almost as much to operate it on the paper fund basis as on the actuarial reserve basis, and the paper fund basis is open to the two following objections raised against the assessment or cash disbursement system.⁴

Liability to
Popular
Misunder-
standing
and Attack

2. That the assessment or cash disbursement basis lays the scheme open to popular opposition and attack in times of economic pressure is the second main objection to it. For almost seventy-five years each successive annual appropriation for the retirement benefits is larger than the appropriation of the preceding year. Since no interest is earned by any fund to help defray the costs of the system, the amount levied against the taxpayers may within less than two decades become equal to what would have been levied annually under an actuarial reserve system, and from this point of equality the levy under the assessment or cash disbursement system goes on ascending, roughly speaking, for over fifty years. The amount taken from the taxpayers in the form of taxes is, therefore, very much greater under the assessment or cash disbursement system than it is under the actuarial reserve system, except in the first few years.

The
Argument
of Equal
Cost

An ingenious and interesting argument has been advanced by certain advocates of the assessment or cash disbursement

⁴ The paper fund method has been used for the Indian Civil Service Family Pension Regulations according to testimony given before the Royal Commission on Civil Service Superannuation. See Report, British Parliamentary Papers, 1903, Vol. XXXIII, p. 123, q. 3485.

system to show that the cost to the taxpayer is the same under either system. It is essentially as follows: A dollar today, invested at 4 per cent is worth two dollars in seventeen and a fraction years from now, and, therefore, taking two dollars from the taxpayer seventeen years from today in lieu of taking a dollar from him today does not change his burden at all, as the dollar or the property it represents is going to earn interest anyway and consequently the whole question resolves itself into one of who shall hold title to the property while it is earning interest and manage it and keep it invested and employed. They believe property is best left in the hands of the taxpayers until needed by the government for immediate expenditure. They contend further that the main reason for maintaining actuarial reserves is in the case of voluntary associations so that the system would be solvent in case no new members should join, but that a retirement system for public employees is a permanent institution with successive generations of members coming on indefinitely and that the solvency of the system rests on the taxing power of the sovereign state.⁵

⁵ The following is the English summary of the remarks of Dr. Ernest Blaschke of Vienna at the Seventh International Actuarial Congress, Amsterdam, 1912 (Vol. 2, pp. 511-512):

"Dr. Ernest Blaschke, Vienna, considered the question whether the correct method of providing pensions for public officials was the level premium system with its resulting accumulation of reserves or the assessment system which would make the pension claims simply a charge on the taxes; the second is the method almost universally adopted even when the officials themselves make contributions. Dr. B. thought the former plan caused a needless amount of labor. In order to establish pension funds on the level premium system the state must collect higher taxes and the part of the taxes which is not required to meet current claims will be handed back by the state by the withdrawal from circulation of State Securities, which later on it will again place in circulation when the pension claims demand it. Such being the position, Dr. B. said it might well be asked what object is attained if the state collects these taxes only immediately to hand them back. Dr. B. then dealt with the question whether the assessment system as opposed to the level premium system did permit of lowering the burden placed on future generations. At the commencement in the case of the level premium system the claims would be less than the premiums collected and

It is a pretty argument and from the theoretical standpoint seems flawless, but it creates an idealized taxpayer with many of the qualities of the economic man. It ignores the point of view of the ordinary everyday taxpayer who votes at elections and is more or less the final authority in matters of government. When seventeen years from today all taxpayers are called upon for two dollars in lieu of the one they were saved today, few of them will appreciate that they were saved a dollar seventeen years ago; in fact, some of them would say if told so that seventeen years ago they did not own the property on which they are taxed and hence could not have been saved the money. The man who was actually saved a dollar may have spent it in consumption and may be irritated by the growing demands for retirement liabilities. Although it must be admitted that a retirement fund on the actuarial reserve basis is not necessarily a productive force and does not necessarily earn anything and that it affects the distribution of wealth far more than it affects its production, yet even so it would still seem that the fund serves a real purpose, not met by the assessment or cash disbursement system, in protecting the whole retirement scheme from political and popular misunderstanding and attack. It may be questioned, too, whether the creation of a fund is not a form of compulsory saving enforced on the taxpayer that may result in an increase in the world's capital and in its productive force.⁶ This in-

the balance would be set aside for later times. When those times arrived, the cost of the pensions would be less than under the alternative systems. This would, however, only be true if with the growth of the reserve there was no steady increase in the number of taxpayers and in the number of those for whom pensions have to be provided. On account of this increase it has been found that in Austria-Hungary, for example, funds established on the level premium system could not have claimed the advantage of a reduction in the burden per individual when compared with the assessment system. If the state provides pensions suitable to the social positions of its officials, with the reduction in the purchasing power of money increases in pensions would become necessary. No actuarial calculations could provide for this contingency."

⁶ "Social Insurance," by I. M. Rubinow, Henry Holt & Co., New York (1913), p. 364.

genious argument ignores, moreover, the following objections to the assessment or cash disbursement plan.

3. The assessment or cash disbursement plan is inequitable as between successive generations of taxpayers. The generation that creates the scheme and binds the future generations to pay the claims which will arise, escapes almost all financial responsibility. They have created the vested interests which the future generations will be called upon to respect, but they have failed to pay their part of the costs or to make any provision for their payment. Each successive generation will have to pay an increasing burden until the scheme at last reaches stable equilibrium if it ever does, and that depends on whether the public service continues to grow rapidly or whether it ultimately becomes reasonably stationary. In no case under an assessment or cash disbursement system will each generation of taxpayers pay the exact cost of the services which it consumes itself. It may be argued that some of the services rendered today are for the benefit of the future generation and that they should bear their part in paying the costs and that is unquestionably true, but the method of providing for that is by raising money for such services through a serial bond issue or other device that will make each generation pay its reasonable share, and not in forcing on to the future all the payments for retirement benefits arising from the services rendered today regardless of who derives the benefit from these services.

Inequitable
as Between
Successive
Generations
of Tax-
payers

4. The final objection to the assessment or cash disbursement system is that it is ill adapted to the needs of a system designed to give equality of return to all employees and to give employees fair benefits in event of death in the active service, voluntary resignation or dismissal. Although not necessarily inconsistent with a contributory system, it is not readily adaptable to it, and unless a paper fund is established embarrassing questions are likely to arise as to whether the rates of contribution are fair as between the government and its employees and as between different classes of employees.

Not
Adaptable

RETIREMENT OF PUBLIC EMPLOYEES

Even with a paper fund question may arise as to whether the rate of interest used was a fair rate and whether the employees could not have done better if there had been a real fund which they could have invested themselves through trustees. In this connection it should perhaps be noted that the employees are generally familiar with small building loans and other small loans on which the rate of interest is high. Not infrequently they will find it difficult to understand why the rate of interest allowed on a paper fund is so much lower than what they would pay to or receive from a building association. Unless a paper fund is set up it is difficult to determine what is a fair payment on resignation or dismissal. The absence of definite knowledge that arises under an assessment or cash disbursement plan works its way into many of the minute details of the system. It permits slovenly work in devising a system instead of demanding perfection of detail and it passes the burden of slovenly work on to the future to cause its trouble there in the form of friction between the government and its employees.

THE MERITS AND DEFECTS OF THE ACTUARIAL RESERVE PLAN

The Four Merits. The arguments in favor of the actuarial reserve system are essentially the converse of the objections to the assessment or cash disbursement system. They may be summarized as follows:

1. It is equitable as between successive generations of taxpayers, because each generation pays all the obligations incurred for services to that generation.
2. It is businesslike, for all obligations are recorded when incurred and adequate provision is immediately made for meeting them when they become due.
3. It tends to safeguard the system from popular and legislative misunderstanding, because it makes the amount of the burden fairly uniform from year to year, and since a considerable part of the required payments are met by interest

earned by the fund it makes the apparent burden on the taxpayer if not the real burden materially less.

4. It is adaptable. It easily meets the needs of a contributory system, and it makes return of contributions or their equivalent in event of death, resignation or dismissal easy, because the data for determining the amount due are already collected and tabulated and the reserve fund accumulating at interest is the proper source from which to make such payments and they are immediately at hand and necessitate no special appropriation.⁷

Defects Can Be Overcome. The two objections to the actuarial reserve plan are that it is complicated and expensive and that it is dangerous.⁸

⁷ The following English summary of the paper by Mr. Rene Risser before the Seventh International Actuarial Congress, Amsterdam, 1912 (Vol. 2, p. 528-529) is of interest:

"Mr. Rene Risser points out the difference between the system of assessments and that of coverture [actuarial reserve]. According to the system of assessments the state fund would have been charged with 6,600,000 francs in the first year [under the Old Age Pension Insurance Act] gradually increasing to 81,400,000 francs in 43 years, whereas, in the system of coverture the charge of the state would have amounted to 60,000,000 francs for each year. In the fifteenth year of the machinery of the bill, the increasing charges of the assessment system would have attained the amount of 60,000,000 francs, exceeding thus from the 16th year the uniform disbursement of the system of coverture.

Mr. Risser is of opinion that taking the state as a whole and as an everlasting institution both systems can be considered as adequate where in the moment we have to do with an individual organization, for instance, a state railway company, the system of assessments is absolutely to be refused and the system of coverture is only to be admitted."

As to Mr. Risser's personal opinion, he gives the preference to the coverture system also in case of obligation state insurance, because this system alone leads to serious examination of the financial burdens for a long time. In the assessment system, the attention of Parliament and still more of the population is often reserved to the smaller burdens of the first years, whereas the increasing charges of the future are easily neglected.

⁸ "It will be observed that distinct pension funds administered as separate units, into which all contributions are paid, are maintained in connection with both the states teachers' pension systems in Great Britain . . . Similar funds are also maintained in connection with

That it requires the maintenance of a complete system of records, periodical actuarial valuations, and the maintenance of an investment machinery must be admitted; they are the very essence of the system and cannot be eliminated. Without them the system could not possibly work. Their absence is what has wrecked so many schemes which were founded in the belief that they would operate like an actuarial reserve system. It is doubtful, however, if the records which will be required for an actuarial reserve system will involve very many additions to the records which should be kept by civil service commissions, efficiency commissions and agencies dealing with standardization. Through a proper coördination of the central agencies dealing with personnel it would appear possible to develop a system of records that would fulfill many needs. Be that as it may, the cost of operation would be at most but a small fraction of the total sums involved and would probably be fully warranted as a means of securing knowledge as to the real cost of the system.

The elements of danger in a large actuarial reserve are (1) that the power which control of a fund gives may be used for political ends, (2) that the administrators of the fund may prove dishonest and (3) that the fund may be lost through bad investment.⁹ None of these objections seems

the general pension systems of English cities, in which teachers participate . . . The superiority of this plan to that of placing the financial administration of the pension system directly in the hands of the state or city treasury is hardly apparent. Particularly . . . when it is realized that pension systems are not intended to be self-supporting, but must receive aid from public funds. The French plan, in which all contributions are paid directly into the state treasury and all pensions directly from it out of regular appropriations for the purpose, would seem to be the simpler and equally good, everything considered. The financial ability and integrity of the civil corporation ought to be sufficient to meet the self-imposed obligations of the pension laws, including the return of contributions in whatever form in case of withdrawal from the service."—*Teachers' Pension Systems in Great Britain*, Raymond W. Sies, United States Bureau of Education, 1913, Pamphlet No. 34, Whole Number 544, p. 79.

⁹ "I think the general opinion in Germany is that in America the creation of large funds under Government control would cause great

ACTUARIAL RESERVE VS. ASSESSMENT

insuperable, and the methods of overcoming them are fairly obvious. The trustees of the fund who are responsible for its investment should be selected on nonpartisan basis for fairly long terms, and the terms should be so arranged that changes in the membership would be gradual. Employees who have to deal with the funds themselves should be required like other public employees dealing with public funds to give fiduciary bonds. The types of investments which would be legal for the fund could be very definitely defined, and the amount which could be legally invested in any single enterprise or undertaking could be limited, and the whole system could be made subject to the same control that the state exercises over banking institutions and insurance companies. The government could thus secure for its system honest and conservative control; it might not be brilliant control, but safety with a reasonable return is all that is expected.

temptation for their misappropriation. Their collection and distribution would be too dependent upon politics. This opinion seems largely justified in view of the instances of maladministration that so many of your government departments have recently furnished. The German opinion is that the American citizen is as yet too individual in his honesty and efficiency. Collectively, as exhibited in the government of your municipalities you seem to us weak in economical and effective business management and financial integrity."—Quotation from a German answer to Mr. Vanderlip's inquiry regarding the wisdom of establishing the German system of Social Insurance here; in "Insurance for Workingmen," by Frank A. Vanderlip in *North American Review*, Vol. 181, Dec., 1905, p. 327.

CHAPTER XV

THE ESTABLISHMENT AND OPERATION OF A RETIREMENT SYSTEM ON THE ACTUARIAL RESERVE BASIS GENERALLY DESCRIBED

Scope of Chapter. Question Independent of Who Pays Cost. Requires Services of Actuary. Planning Retirement System. Representation of the Parties. Position of Actuary. Establishing the System. Work of Actuary in Developing Premium Rates. Importance of Devising Economical System of Records. Necessity for Collecting Data for Each System. Necessity for Conservative Assumptions. Actuarial Valuations of Established Funds. Necessity for Valuations. The Nature of the Work. How Often Necessary.

SCOPE OF CHAPTER

The object sought in establishing a retirement fund on the actuarial reserve basis is to secure the payment into the fund at the time services are rendered of a sum which invested at compound interest will broadly speaking, pay all the benefits which the fund will ever be called upon to grant as the result of these services. The merits of the actuarial reserve plan, as contrasted with the alternative assessment or cash disbursement plan, have been set forth in the preceding chapter. The purpose of the present chapter is to describe in a general and non-technical manner how a fund is established and operated on an actuarial reserve basis. It is not of course intended for actuaries, but rather for the laymen who are called upon to work with actuaries. Those who are interested in the detailed actuarial processes will find of interest papers in the proceedings of the various actuarial societies and also numerous reports on valuations of individual funds. The English and Scotch actuaries have had more experience with retirement systems than have American actuaries and conse-

quently the proceedings of their societies are richer in papers on the subject, and more reports of actuarial valuations are available regarding English and Scotch funds, but special attention should be called to the actuarial reports of the New York Pension Commission, in which the actuary, Mr. George B. Buck, has presented the detailed formulæ employed by him with a careful explanation of the symbols and methods used. This report was published in 1916. As New York City has many different funds and as some of them were highly complicated, the actuarial report of the Commission covers a wide field of actuarial science as it is applied to retirement systems at the present time.¹ Attention should also be called to the report of Mr. Wm. A. Hutcheson, Actuary of the Mutual Life Insurance Company, on the Condition of the Public School Teachers' Retirement Fund of New York City, printed in the Sixth Annual Report of the Secretary of the Board of Retirement. This report contains a remarkably clear statement of the processes followed in the actuarial valuation. Mr. Herbert D. Brown's "Savings and Annuity Plan Proposed for Retirement of Superannuated Civil Service Employees" gives a good simple discussion of the mathematical basis of his plan.² The science is of course a developing one, and improvements in technique are being made constantly.

QUESTION INDEPENDENT OF WHO PAYS COST

That a system may be operated on the actuarial reserve basis regardless of who pays the costs, the employer, the em-

¹ The New York funds valued were not being operated on a true actuarial reserve basis, and the report shows the enormous liabilities that accrue, without any provision to meet them, even in a comparatively few years' operation under an assessment or cash disbursement plan founded in the mistaken belief that the mere establishment of a fund makes a system operated on the actuarial reserve basis. Unfortunately other places have in some instances copied the defective legislation of New York and are headed toward the same difficulties in which New York finds itself.

² Senate Document, No. 290, 61st Congress, 2d Session, reprinted in House Document, No. 732, 62d Congress, 2d Session.

RETIREMENT OF PUBLIC EMPLOYEES

ployee, or the two combined, should once again be emphasized. So far as the actuary is concerned the question of who pays the money is a matter of practically no importance. To avoid any possible confusion on this point that might arise from the use of the more familiar terms "contributions" and "contribution rates," the terms "premium" and "premium rates" will be substituted throughout the present chapter. The premiums and the premium rates will be the same regardless of who pays the money, unless the employees take an advantage of the system when the employer pays for it that they would not take if they paid for it themselves, but this element of selection can safely be ignored in the present discussion.

REQUIRES SERVICES OF ACTUARY

That the establishment and maintenance of a fund on an actuarial reserve basis requires the services of an actuary and not of an accountant also deserves repetition. As will be described more at length in the following pages, the work involves forecasting the future on the basis of the past through the application of mathematical laws of probability, and the practical application of these laws is the profession of the actuary and not that of the expert accountant. Some expert accountants of course may be actuaries, just as some actuaries are expert accountants, but when a man qualified in the two fields deals with a retirement system he uses the methods of the actuary. The fact that several systems devised by expert accountants who were not actuaries have come to grief, and that men of affairs are sometimes not aware of the true qualifications required for such technical computations makes it difficult to overemphasize the importance of having the work done by a member of the profession which specializes in actuarial science.³

³ Some of the English Railway funds made changes in their systems on the advice of their expert accountants and became insolvent. See Report of the Board of Trade Committee on Railway Superannuation Funds. British Parliamentary Papers (1910), Vol. 57, and (1911), Vol. 29.

OPERATION ON ACTUARIAL RESERVE BASIS

The services of a competent actuary are required in the discussion of the plans for the system, in putting the scheme finally decided upon in operation, and after it is in operation in maintaining it in a constant state of solvency.

PLANNING A RETIREMENT SYSTEM

Representation of the Parties. Judging from the mistakes of the past, one would say that the ideal way to devise a retirement system would be to recognize clearly at the outset that an ideal system is a satisfactory compromise between the government, its employees and the public, so devised that it is financially sound; and accordingly to arrange that each party shall be suitably represented either in or before the body planning the system and that all shall have the advice and assistance of at least one impartial actuary. The interests of the government can be properly presented by the administrative officers of the government, and by the legislative authorities, who will also represent the public. Unfortunately in devising retirement schemes representation of the employees has frequently been omitted. Sometimes the employees have scarcely been heard at all in the initiation of schemes, but more frequently the older experienced employees have been heard and the younger employees, the newer men, have had no voice. Yet the newer men, for the reasons set forth in Chapter one, page 17, are the only ones who have at all the point of view of new entrants to whose needs the scheme to be adopted must conform if it is to be a permanent success. To secure representation of the younger employees it would seem desirable to provide for formal and official organization of the employees into two or more classes according to length of service, to have each class elect representatives on a class committee which shall in turn elect representatives to confer directly with the representatives of the public and of the government. The whole body of employees could thus be represented formally and an organization could be created through which the various questions could be

Division
of Em-
ployees into
Classes

Referendum
Votes

RETIREMENT OF PUBLIC EMPLOYEES

brought back to the great body of employees for discussion. Referendum votes on certain of the points in which the interests of the employees are the determining factor seem highly desirable and they have been used to marked advantage in some of the English services. Experience would tend to show, however, that they must be official and formal, with due provision for secrecy. In the attempted reorganization of the New York Teachers' Retirement Fund in 1916, a referendum vote conducted openly through the ordinary line of authority resulted in friction and in charges that the older employees, being in positions of authority, attempted to intimidate the younger employees and to influence the balloting. Some friction and charges of intimidation marked the early stages of the movement that culminated in the English Elementary School Teachers' Deferred Annuity Fund. The English Teachers' experience shows further that when the employees are thoroughly informed of the details and know the costs, a considerable degree of harmony can be restored and that something approaching unanimity of opinion can be reached.⁴

Position of Actuary. To the actuary each of the three parties must be able to turn not only to know what the provision they desire will cost,⁵ but also to know whether it is feasible. Not infrequently the layman works out something which is

⁴ The experience of the British railway superannuation funds indicates that it is desirable to have the contributing members represented on the board of managers. The investigating committee suggested equal representation of the employees and the employers with a neutral arbitrator. See Report of the Committee of the Board of Trade in Railway Superannuation Funds, British Parliamentary Papers, 1910, Vol. 57, p. 24.

⁵ "The fundamental equation, 'Benefits equal contributions,' must be maintained. If the benefit is increased so must the contributions be increased in proportion, either by applying surplus funds thereto or by an increase in the scale of contribution. Neglect of this obvious precaution can only have a disastrous effect upon the funds; complications will arise and serious trouble will begin." "Widows' and Pension Funds," by Archibald Hewat, Edinburgh, T. and A. Constable, 1912, p. 19.

OPERATION ON ACTUARIAL RESERVE BASIS

apparently simple and desirable but actuarially is so complicated as to be impracticable; but generally the actuary can suggest a practicable method of securing the same end. Unfortunately in the development of many retirement systems, the original plans have been drawn in the first instance by laymen without professional advice and finally when the actuaries have been called in to set matters straight they have not been able to start with whole cloth, but have been obliged to do the best possible job of patchwork.

In addition to the actuary the government body would do well to have as an adviser someone who is familiar with the operation of retirement systems as they relate to social, economic and administrative problems, but such a person is less indispensable than a properly qualified actuary experienced in the valuation of retirement funds. The legislator is far better qualified to answer social, economic and administrative questions for himself than he is to attempt the complex actuarial computations that are necessary if the system is to be financially sound.

ESTABLISHING THE SYSTEM

Work of Actuary in Developing Premium Rates. After the general plan has been agreed upon the first work of the actuary is to develop, if he has not already done so, the exact premium rates that will have to be charged in respect to each new entrant into the service.

Four distinct processes may be recognized in the work which the actuary does in developing these rates. They are as follows:

Four
Processes
Involved

1. To determine by analysis the forces on which the cost of the system or the premiums will depend.
2. To determine in so far as possible by exact measurement exactly how these forces have operated in the past.
3. To develop rates which will indicate how these forces will probably operate in the future, or if no satisfactory data are available to permit of the development of such rates, to

RETIREMENT OF PUBLIC EMPLOYEES

adopt suitable rates based on the past experience of other funds.

4. To combine these rates with each other and with money rates to give the final premium rates.

Forces on
Which Cost
Depend

The forces on which the cost of the system depends are determined largely by the type of system devised and the conditions upon which benefits are granted. An actuarially simple superannuation system may be established, the stability of which will depend simply on the rate of interest and the rate of mortality after retirement on superannuation benefits, and a disability benefit may be added by bringing in the rate of disability, the rate of mortality in the active service, the rate of withdrawal and the rate of mortality after retirement on disability benefits. A highly complicated system might include as forces determining cost the following factors: Interest, Death in the active service occurring in the actual performance of duty, Death in the active service not occurring in the actual performance of duty, Resignation from the active service, Dismissal from the active service, Disability retirement, the disability occurring in the actual performance of duty, Disability retirement, the disability not occurring in the active performance of duty, Service or superannuation retirement, Death among employees retired because of disability incurred in the actual performance of duty, Death among employees retired because of other disability, Death among employees retired on superannuation or service benefits, The marital condition of employees, The condition of employees in respect to children, The condition of the employees in respect to parents, Death among employees' widows, The marriage rate of employees' widows, Death among employees' children, Death among employees' parents, The scale of salaries, The length of service of the employees, The age of the employees, The sex of the employees, The occupation of the employees, and The conditions upon which benefits are granted. Under conditions may be included the age and service limitations governing service or superannuation retirement

and the service limitations governing disability retirement, which may be different according as the disability is or is not incurred in the actual performance of duty. Though it is doubtful whether a practical actuary would recommend the establishment of a scheme involving all these factors, he may be called upon to consider one devised by laymen in which each one is involved.

When the actuary is called into consultation in planning the scheme he is of course unable to measure the working of all these forces on the basis of past experience. Some of them will not come into operation until after the system has been established and others which have been in operation in the past may be influenced by the establishment of the system.

Measure-
ment of
Forces

The rate of resignation from the service, and the rate of dismissal are both rates which may be seriously affected by the introduction of a retirement system. The system may prove a very strong factor in retaining men in the service who would otherwise have resigned, and consequently the rate of retirement will be reduced. If resignations are to yield a profit to the fund, and if it has been anticipated that they will occur at the old rate, the amount of profit from this source may be greatly overestimated, and a deficit may result. The conservative actuary therefore would hesitate to estimate for the fund the full profit from resignations at the old rate. He would either reduce the rate as based on past experience or else he would use the data regarding resignations as merely indicative of the general trend of resignation in that service, and he would adopt a rate from the experience of some other fund. The uncertainty of the rate of resignation is, in fact, fairly great; and the soundness of the system from the actuarial point of view is increased if the fund derives neither profit nor loss from resignations. The same general statements are true regarding dismissals.

The Rate
of With-
drawal

The rate of salary change may also be affected by the introduction of an adequate retirement system. Promotions will be more rapid after the establishment of the system and

The Rate
of Salary
Change

RETIREMENT OF PUBLIC EMPLOYEES

employees will reach the higher positions at earlier ages. The actuary would, therefore, have to be cautious in adopting the salary scale of a service without a retirement system for that service after the retirement system had been established, because he might find that the benefits were higher than he had anticipated and that the increased contributions were not proportional. This danger would be particularly great if the benefits were based on some form of terminal salary.⁶

Develop-
ment of
Experience
Rates

Regarding all the forces which cannot be measured accurately on the basis of data collected relating to past experience, the actuary will generally attempt to secure all available detailed information that will indicate what is to be expected in the future. Regarding the forces which can be accurately measured, he will collect all the facts needed for the development of an adequate set of rates. The mortality rate, or the death rate as it is sometimes called, for employees in the active service is perhaps as typical as any of the rates and is as illustrative of their general nature. Roughly speaking, the actuary determines for each age the number of employees who were in the active service at that age in the period covered. This number he refers to as "the number exposed to risk," because these were the employees among whom death at that age could occur. The actuary then finds how many deaths actually did occur among the employees at that age in the period studied. By dividing the number of deaths at that age by the number exposed to risk at that age, he finds the proportion that died, or in other words the death rate for the age. Similarly he finds how many were dismissed at that age, and gets the rate of dismissal by dividing by the number exposed to risk; he finds how many resigned, and gets the rate of resignation by dividing by the number exposed to risk, and similarly he gets the rate of disability, the rate of superannuation retirement and the other rates that are needed. By adding together the numbers representing those who left the service

⁶ For a more detailed discussion of the objections to the use of the salary scale, see page 128.

OPERATION ON ACTUARIAL RESERVE BASIS

and subtracting it from the number exposed to risk he gets the number who survived in the active service at the end of the year. The number exposed to risk is therefore a highly important figure and is the basis of many calculations. The actuary has to get the various rates for each age, and ordinarily when he speaks, for example, of "the mortality rate in the active service," he refers to the whole series of rates representing each age at which an employee is in the service.

The rates as based on the actual figures do not ordinarily progress in a smooth series, and if plotted on cross section paper do not form a smooth curve, because the numbers on which they are based are sometimes small, and a slight excess of deaths at one age and an absence of deaths at the next will cause violent changes in the rates as one passes from age to age. Clearly these violent changes are not due to violent changes in the actions of the law of nature governing mortality, but are chance errors and are due to the fact that the actuary's figures are based on small numbers that permit small numerical changes to exert a great influence on the rate. The actuary therefore graduates the curve so that it will be smooth, by raising some of the abnormally low points and lowering some of the abnormally high points until his curve reflects what is approximately the fundamental operation of the forces at that time. This graduation may be done by the use of mechanical instruments and observation or by the application of highly developed mathematical formulæ. When it is completed it is checked by showing that, had the rates in the graduated curve been in operation, the number of deaths within any, say, five-year period would have been the same as the number that actually did occur in that five-year period. The adjusted rates may show, for example, a few more deaths at ages 56, 57 and 59 than actually did occur and a few less at 55 and 58, but the total for the ages 55 to 59 will be the same for the adjusted as for the unadjusted rates. These adjusted rates the actuary uses in anticipating the future.

Graduating
Rates

The actuary next constructs what he calls a service table by

RETIREMENT OF PUBLIC EMPLOYEES

Service Table

assuming that, say a hundred thousand men, enter the service at the earliest entrance age. By applying the various rates of that age to this entering body he finds how many will be lost to the service in the first year, and by subtracting the total of these losses he gets the number that will survive at the beginning of the next year. To these survivors he applies the rates for their age and again gets losses and survivors; and thus he proceeds until the last of the employees pass from the service. By taking the number of employees in the service at age 27, according to this service table, and dividing it into the number surviving at age 65, he can determine, for example, what proportion of those who are now 27 will probably be surviving in the service at 65. This active service table ordinarily forms the basis for his computations regarding persons in the active service. Similar tables are prepared showing the experience of persons retired on disability benefits and on superannuation benefits. In some complicated systems which give the employee the right to retire after a certain number of years of service more than one active service table is required.

Money Values

After the actuary has worked out the necessary service tables he combines the rates with the money values in such a way that he can determine the premium rates. In this branch of work the factor of interest is the dominating one. If one has in hand at the present moment one dollar which is invested immediately at 4 per cent, interest compounded semi-annually, that dollar at the end of seventeen years and a fraction will have earned a dollar in interest. If, therefore, one had a bill of two dollars to pay in seventeen and a fraction years from now, he would make sufficient provision for it if today he put one dollar in a savings bank that guaranteed him 4 per cent interest compounded semi-annually. The actuary has to figure on the one hand on paying claims year after year and on the other hand on receiving premium payments year after year. He must therefore combine the interest factor with the other factors so that he can deal uniformly with pres-

OPERATION ON ACTUARIAL RESERVE BASIS

ent values and eliminate the time factors. The present value of a payment to be made in the future is the amount which in hand today at the given rate of interest will equal the payment on the future day.

Importance of Devising Economical System of Records. The collection of data regarding the forces that determine the cost of the system and the installation of an adequate system of records so that in the future the necessary facts can be secured easily and cheaply are two of the principal services which the actuary renders at the installation of a system. The cost of the future administration of the fund will in a large measure depend on the system of records installed at the outset. An adequate set of records devised to facilitate actuarial valuations and to permit of a maximum utilization of modern mechanical devices for tabulation will in all probability pay the fee for the actuary's services within a comparatively few years. An inadequate set of records ill adapted for use in connection with mechanical devices for tabulation will be a constant source of loss and will doubtless be discarded when a real actuarial valuation of the fund is made. It must be constantly borne in mind that the actuary has to have facts regarding all present employees and all beneficiaries and regarding some former employees and that all these facts have to be combined and recombined in tables to show what actually happened. The problem of tabulation is therefore a highly important one, and the expense can be markedly reduced by a competent and experienced actuary.

Necessity for Collecting Data for Each System. "Why is all this collection of data necessary?" it may be asked. "If the actuary can adopt rates from the experience of other funds to measure the action of certain forces, why should he not adopt rates from other funds to measure all forces, and thereby eliminate all the costly tabulation?" These questions will occur quickly to the minds of those who are familiar with

RETIREMENT OF PUBLIC EMPLOYEES

the supervision of life insurance companies in which certain tables of mortality are accepted as standards for certain purposes in making valuations. Experience has proved, however, that this practice is unsafe. The late Henry W. Manly, the distinguished English actuary, who was among the first to develop the application of actuarial science to retirement systems, prepared a paper in which he presented a series of tables showing the rates used in valuing funds. In the discussion of this paper Mr. George King, another actuary, who has also won a high reputation in the valuation of retirement funds, is reported as having said ⁷ that he thought "that Mr. Manly's industry and thoroughness might perhaps be a source of danger because [the tables he had prepared] would tempt those persons who were not so industrious and who had funds of this kind to value, to use Mr. Manly's tables. His own experience was most emphatically that, although for mortality

⁷ *Journal of the Institute of Actuaries*, Oct., 1903, Vol. 38, p. 168.

In his own paper on "Staff Pension Funds" Mr. King wrote:

"The statistics of one fund cannot safely be used for another; and therefore notwithstanding the excellent work done in this connection by Mr. Manly, I deprecate the publication of standard Pension Fund tables; and especially of voluminous monetary tables based upon them, such as those given to us by him. They are very liable to be misleading unless indeed they are used with the most extreme discretion and modified fully after collation with the actual experience of the fund to be valued. It is far better, in the case of each fund, to go to the comparatively small trouble of preparing special monetary tables suited to its own circumstances. Mr. Manly himself (*Journal of the Institute of Actuaries*, Vol. XXXVI, p. 258) has uttered a most emphatic word of warning which should not be overlooked."—George King on "Staff Pension Funds," *Journal of the Institute of Actuaries*, Vol. 39 (1905), p. 135.

"Each fund is a law to itself and the law may change from time to time, so that it is essential to base the valuation—either explicitly or by adjustment—on data derived from the recent experience of the fund. While those principles are recognized as fundamental by all actuaries experienced in this branch of work, they cannot be too strongly emphasized or illustrated, for experience shows that even when there is much in common between the occupations and social positions of the members of two different funds, it is unsafe to assume that the same basis of valuation will apply to both."—Mr. G. J. Lidstone in discussing S. J. H. W. Allin, F.I.A.; paper on "Widows' and Orphans' Pension Funds," *Journal of the Institute of Actuaries*, Vol. 39, p. 364.

OPERATION ON ACTUARIAL RESERVE BASIS

purposes it might be safe to use one experience for another fund, yet for pension purposes the funds were so very different that he did not think that they could find two sufficiently near for them to apply the same experience to both." Mr. Manly himself wrote: "There was a time—many years now—when I thought it might be possible to value all these funds by standard tables, but I am now convinced that that is quite impossible."⁸

Experience has indeed proved abundantly that the number of possible variables in a retirement fund is so great that each fund is more or less a law unto itself. Today it is doubtful if a cautious actuary would attempt to adopt even a mortality rate from another experience without collecting statistics of mortality in the service covered to make sure that the rate was applicable. The English Elementary School Teachers' Deferred Annuity Fund has demonstrated, for example, that retired school teachers are extremely long-lived, and that the mortality rate based on the experience of purchasers of annuities from the English Post Office system, regarded as a very conservative table, did not represent such a long-lived group as school teachers proved to be.⁹ The teachers' annuities have therefore been more expensive than was anticipated. Rates based on a group of people of various occupations and social classes may be generally said to be inapplicable to a group of people of a common occupation and of a common social class. It follows, therefore, as a necessary consequence that, whenever the nature and extent of the data will permit, the

⁸ *Journal of the Institute of Actuaries*, April, 1911, Vol. 45, p. 182.

⁹ "Looking at Table V, for males, it will be seen that, while the actual deaths recorded among the teachers were 1,071, those that would have occurred had the mortality of government annuitants prevailed would have been 2,963; and these would have been 2,025 deaths had the mortality followed the table recently prepared by the British assurance companies. Similarly, in Table VI in the case of female teachers, the actual deaths recorded was 872 in number, while those expected by the government table were 2,630 and by the British offices table 2,397."—First Septennial Actuarial Report on the Assets and Liabilities of the Elementary School Teachers' Deferred Annuity Fund, British Parliamentary Papers, 1908, Vol. LXXXIII, p. 5.

RETIREMENT OF PUBLIC EMPLOYEES

actuary must develop original rates for the fund being valued and that when this is impossible he must get such evidence as he can and select a rate from the fund which is most nearly similar. The actuary dealing with retirement funds must be familiar with a wide range of rates and cannot depend on a single small group as standards.

Necessity for Conservative Assumptions. Actuarial science, then, as applied to retirement systems, especially as applied to the problems involved in their introduction in the first instance, calls upon the actuary for the exercise of judgment. His first duty to all concerned is to be consistently conservative regardless of the pressure which will almost inevitably be brought upon him by those who want large benefits, especially by the older present employees. The older present employees, as has already been noted, cannot possibly pay the full cost of the benefits they will receive. They will get something for nothing. They are interested in securing a large benefit and they are not sobered by the cost. Unfortunately in this country we have many precedents of retirement systems in which large benefits are being paid for a fraction of their real cost, systems that are really bankrupt but have not yet demonstrated that fact to the public. When the actuary announces his cost figures, everyone concerned is frequently more or less stunned and surprised that benefits cost so much and the older present employees in all probability will open fire on the actuary. He must be wrong. Occasionally in the discussion that follows a point may be found at which the consensus of opinion among the employees and their friends is that the actuary has been over conservative, and therefore his work is unreliable. If they had discovered a point at which he had been under conservative, their charge of unreliability might be justified. The consistently conservative actuary is the reliable actuary. His mistakes create surpluses and not deficits. His errors can be corrected by an increase in benefits or by a reduction in premiums. The mistakes of

OPERATION ON ACTUARIAL RESERVE BASIS

the actuary who is not conservative mean deficits and an ultimate increase in rates or a decrease in benefits.

The fact that a certain amount of judgment has to be used in selecting the rates and in modifying them to meet anticipated future changes added to the fact that unforeseen changes may take place in the future makes it necessary for the government under a contributory system to reserve the right to change the premium rates. It would of course have the right to change them for new entrants even if the right were not specifically reserved, but unless the government is prepared to guarantee the entire system for all who enter under it,¹⁰ the rates may have to be changed from time to time in respect to present employees.

ACTUARIAL VALUATIONS OF ESTABLISHED FUNDS

Necessity for Valuation. A system operated on the actuarial reserve basis never reaches a point at which it can go on indefinitely without the services of an actuary. One must be retained from time to time to determine the precise condition of the fund and if necessary readjust the premium rates or the benefits in such a way as to restore the necessary equilibrium between assets and liabilities. In large funds the continuous employment of an actuary might prove advisable, whereas in a smaller fund it would be sufficient to employ one periodically.

The Nature of the Work. Determining the financial condition of the fund is called an actuarial valuation. The problem is not at all the same as the problem of determining one's own private financial condition which in its simplest form consists only in balancing what one owes against what one has. In valuing a pension fund the future has to be forecasted. The actuary must predict what will happen in order to determine the

¹⁰ For a discussion of the advisability of guaranteeing the system, see p. 100.

RETIREMENT OF PUBLIC EMPLOYEES

magnitude of the liabilities that have been incurred in respect to people now in the service who have certain retirement rights provided certain contingencies happen and provided they fulfill certain conditions, and also to determine the magnitude of the assets which will accrue to the retirement system from the sources of revenue established under the law, which are generally contingent. The actuary forecasts the future in making the valuation by the same general processes he pursued in fixing the premium rates in the first instance, namely (1) By determining by analysis the precise factors that affect the financial condition of the fund. (2) By determining exactly how they have acted since the establishment of the fund or since the last preceding actuarial valuation. (3) By developing rates of probability from this experience and (4) By applying these rates, combined with the money values, to the persons already in the service to get the financial condition of the fund.

The
Actuarial
Balance
Sheet

The first product of an actuarial valuation is an actuarial balance sheet, which contrasts the present value of the liabilities with the present value of the assets.¹¹ This present value makes due allowance for the difference between a dollar in hand and a dollar to be received in the future and the difference between a dollar due to be paid today and a dollar due to be paid in the future. It eliminates the factors of time and interest and makes the statement similar to a personal account that relates solely to the present. It shows whether the fund, if wound up today, could or could not pay each man exactly the true value of his claims without any surplus or deficit.

The New
Schedule of
Premiums
and
Benefits

The second product of the actuarial valuation is the new table of premium rates or the new table of benefits. Under an equitable system which grants a fixed benefit the premium rates will vary according to the employee's age at entrance, and if a large number of men and women are employed the rates for the two sexes will be different, and if the employees are

¹¹ For a definition of present value, see page 348.

OPERATION ON ACTUARIAL RESERVE BASIS

divisible into distinct groups or classes according to occupation, so that the life history of the different groups is distinct, the rates for the groups will be different. The reason for these differences have been considered at length in the Chapter on the Superannuation Benefit, pages 163 to 170, and in the Chapter on the Disability Benefit, pages 204 to 206.

How Often Necessary. "How often is an actuarial valuation necessary?" is a natural question, and no precise answer can be given. It would doubtless depend on the size of the fund and the number and character of the variables or forces included in the system in such a way as to affect its financial stability. Frequent valuations of a small fund would not give a sufficient body of data for reliable new rates. Very large funds might give sufficient data for annual valuations so that they would be under constant actuarial control. Funds in which the forces determining cost are mortality of retired employees and interest would not require such frequent valuations as those which permit the stability of the fund to turn in part upon such uncertain factors as withdrawal rates and salary scales.

In conclusion it may be said that, with due respect to the actuaries, the safer course would appear to be to reduce to a minimum the number of factors upon which the financial stability of the fund will depend. This course simplifies the actuarial work and diminishes the chances of creating a deficit for the future to meet. The majority of precedents probably favor the more complicated schemes, but frequently these schemes have grown largely without deliberate planning, and, as has frequently been mentioned, the natural way to develop a retirement system is probably the worst way. It results in the end in something highly complex, whereas if it were carefully thought out in advance the same general results could be produced by something which was comparatively simple.

CHAPTER XVI

THE ACTUARIAL DEFICIT CREATED WHEN A NEW SYSTEM PROMISES BENEFITS TO PRESENT EMPLOYEES FOR PAST SERVICES

The Origin of the Deficit. Effect of Ignoring Deficit. Methods of Financing Deficit. Creating Perpetuity. Payments by Installments.

THE ORIGIN OF THE DEFICIT

When a system is created that promises benefits to the present employees for services which they have rendered in the past, it starts with a large deficit, because obviously no assets are already in hand to meet the liabilities thus assumed for past services. The whole cost of the retirement allowances for the present employee who is already at the retirement age is a deficit, since no provision has been made in the past toward giving him an allowance. The present employee who has been in the service but a year occasions only a small deficit, namely the present value of the amount that would be required to give him the promised allowance in respect to that one year. Between the present employee who is about to retire and the present employee who has just entered the service fall the great bulk of the employees. Each creates his deficit and the total of these deficits is generally, in proportion to the pay roll, a very large sum.

EFFECT OF IGNORING DEFICIT

If the existence of this deficit is ignored and if no special provision is made to accumulate assets to meet it, the fund for a certain number of years will to that extent operate on the assessment or cash disbursement basis. Since compara-

THE ACTUARIAL DEFICIT

tively few present employees are already of an age to retire, the assessments against the taxpayers immediately following the introduction of the system will be small in respect to benefits for past services. As each successive year adds its increment to the group already retired, the amount the taxpayers will be called upon to pay will increase. Presently a maximum point will be reached, after which the annual assessment will gradually diminish. Deaths among the older beneficiaries who rendered much of their service prior to the establishment of the system will release the fund from heavy payments in their behalf, and the beneficiaries who take their places will be those who were comparatively young and new to the service when the system was adopted. Later a time will come when all the employees who were in the service when the system was introduced will have passed to the retired list. Each year will then witness a rapid reduction in the number of beneficiaries, until ultimately some seventy or seventy-five years after the system was introduced the last payments will be made in respect to services which were rendered prior to the existence of the system.

This gradual fall in payments after the maximum and their ultimate cessation distinguishes treating the deficit arising in respect to past services on the assessment or cash disbursement basis from treating the entire system on that basis. If the entire system is treated on the assessment or cash disbursement basis, an approximate maximum is reached which is never diminished unless the size of the service diminishes or unless the system is wound up, whereas if the deficit only is thus treated a steady decrease sets in the moment the maximum is reached and ultimately the deficit disappears entirely.

Two objections may be raised against ignoring the deficit for past service and financing the benefits by assessment against the taxpayers at the time the benefit payments fall due. The method is inequitable as between successive generations of taxpayers, and it requires that the whole amount be raised as taxes instead of letting part of it be earned as

RETIREMENT OF PUBLIC EMPLOYEES

interest. The generation of taxpayers which establishes the system includes among its number more who have personally benefited from the consumption of these services than any succeeding generation will contain, and yet this generation, which establishes the system and binds the future generations to pay for it, slips out without paying more than a very small fraction of the cost. If they paid something to a fund to accumulate at interest, the cash payments of each generation could of course be reduced, because interest would pay part. The reduction of the amount which the taxpayers would be called upon to bear would tend to prevent the fund from becoming unpopular with them.

The actuary in stating the amount of this deficit, it should be specifically noted, gives it in terms of present value, that is, it is given as an amount which if in hand today would pay the costs of benefits for past services as they fall due, provided it was invested so as to earn the rate of interest assumed in the actuarial calculations. If it is not in hand today and invested at that rate of interest, it will partake of the nature of a mortgage and the taxpayers will not only have to pay the principal ultimately, but they will have to pay interest on the unpaid balance until it is paid.

METHODS OF FINANCING DEFICIT

As few government organizations could, even if it were deemed advisable, collect the entire amount of the deficit immediately, other methods of meeting it have to be considered. One possible device is to permit it to run on as a perpetuity and to have the taxpayers each year pay the interest. Under such a system the debt itself is never paid. Under the other systems provision is made for discharging the debt on the installment plan, much as the man who borrows from a building association to construct a house repays on the installment plan. Two variations of this plan deserve mention. Under the first a uniform fixed payment is made which is applied first to paying the interest, and after the interest is paid the

THE ACTUARIAL DEFICIT

balance is used to curtail the debt. Under the second a certain uniform amount is paid each year toward curtailing the debt and in addition a sum is appropriated each year to pay the interest on the balance outstanding. Under the first the aggregate annual payment is the same each year until the debt is paid, whereas under the second the aggregate payment diminishes each year until ultimately the debt is paid by a last appropriation of the annual amount paid on the principal. The number of years within which the deficit is to be discharged is of course a matter of judgment or expediency; it can be varied at will without affecting the general operation of the devices. The larger the periods of course, the smaller will be the annual payment.

Creating Perpetuity. Permitting the deficit to become a perpetuity and paying the interest on it annually is an entirely feasible method. Bonds of the government would be issued to the retirement system for the entire amount of the deficit bearing interest at the rate used by the actuaries in determining the amount of the deficit. Each year the government would have to appropriate the interest for these bonds just as it would appropriate interest on any of the other obligations. When the time came that the present employees' retirement allowances would cost more than the interest and its earnings, the premiums in behalf of new entrants and their accumulations could be invested in these bonds, and the purchase price thus secured could be utilized in making payments to the present employees. The bonds would thus become the first investment of the fund, and if the fund were never wound up the bonds would never have to be paid, though the government in perpetuity would have to pay interest on them.

In favor of this device of creating a perpetuity some arguments can be advanced. The system that creates the deficit is introduced because it is believed that it will be of permanent benefit, that all future generations will gain through the resulting improvement of character and efficiency of the pub-

RETIREMENT OF PUBLIC EMPLOYEES

lic service. The obligation arises not from any act of omission of the generation of taxpayers that established the system, but from the acts of omission of preceding generations of taxpayers who acquiesced in the continued existence of the old system. The present generation may argue not only that they owe no greater payments than the others, but that they actually owe less, because the full benefits of an adequate system cannot be reaped at once, but only after it has been in operation for some years. It may be further pointed out that the amount of interest under such a system is a constant, and therefore as the value of taxable property or of the taxable base increases, the rate of the levy in respect to this deficit diminishes, so that although each successive generation pays the same actual amount, the tendency is for each succeeding generation to pay a smaller rate, or a smaller percapita tax.

Against this attempt at justification of the creation of a perpetuity it may be urged that next to past generations the immediate generation is more largely responsible than any other for the deficit. It created the system, and it contains a maximum number of those who received services from the present employees without making any provision to protect the government from the losses which it would sustain in carrying them on the active rolls after they are superannuated or disabled. The present generation under a retirement system does reap a peculiar saving from its establishment. It is relieved of paying salaries to the persons who are already superannuated or disabled, which was its share under the old system; and by establishing a perpetuity it escapes with only the payment of interest on the obligation.

Payments by Installments. The method of paying off the deficit in the course of a given number of years is advocated by those who believe the present generation is under greater obligations to meet it than any other generation upon which it can be placed. It contains the largest number of persons who benefited from the services in respect to which the deficit

THE ACTUARIAL DEFICIT

arises, and the installation of the system relieves this generation from paying what would have been its share of the cost of the old system of retaining the disabled and the superannuated on the active rolls.

If the method of paying off the deficit in a given number of years is adopted, the decision will be reached partly on the ground of expediency and partly on this ground of justice as between successive generations of taxpayers. The latter ground may be used as a basis for determining the number of years within which the deficit shall be canceled. It may be argued that an infant taxpayer who received only a few days' service before the introduction of the system might live to be approximately a hundred, and thus a hundred years would mark the end of the period during which any part of the burden would fall on those who were taxpayers at the time services were rendered. But clearly the period of one hundred years would be too long to be fair, because it assumes taxpaying from infancy and an extreme span of life. Sixty years has been adopted for the Liverpool Corporation Superannuation Fund, and it seems a reasonable period. After sixty years, moreover, most of the employees for whom the deficit has been incurred will be no longer living and therefore 60 years may be selected on the ground that it terminates the payments toward the deficit at approximately the time when those for whom it was incurred have passed from the pension rolls.¹

If the desire is to increase the burden on the present taxpayers, the device of the uniform annual payments to curtail the principal of the debt with a diminishing payment as the interest charge on the unpaid balance would suggest itself. The further the taxpayers were removed from the date of the adoption of the system, the less they would be called upon to

¹ See "On the Superannuation and Pension Funds of Certain Metropolitan Borough Councils, Their Establishment, Administration and Actuarial Investigation," by Henry W. Manly and Thomas G. Ackland. *Journal of the Institute of Actuaries*, Vol. 46 (1912), p. 327.

RETIREMENT OF PUBLIC EMPLOYEES

pay. It would, moreover, be entirely feasible to graduate the payments to curtail the principal of the debt in such a way that the burden on the present generation would be increased and that on the future generation diminished.

The possible variations are in fact almost innumerable. The essential point is to recognize clearly that a deficit exists at the start and that some adequate means of meeting it should be adopted at the time the system is established.

CHAPTER XVII

SYSTEMS TOO SMALL TO BE CONDUCTED ON ACTUARIAL RESERVE BASIS

Scope for Law of Averages Required. Methods of Securing Numbers. Centralized Systems. Private Insurance Organizations.

SCOPE FOR LAW OF AVERAGES REQUIRED

To permit of the maintenance of a fund on the actuarial reserve basis the number of employees must be sufficiently large to give full scope to the operation of the law of averages. It is on this law that the actuaries depend for the success of their calculations. They cannot tell of course how long any one individual will live, but they can predict with a striking degree of accuracy how many will die each year out of any large group. They can determine the rate at which death will strike, but they cannot foretell who will be the victims. When only a few employees are involved the methods of the actuary become inapplicable. If the attempt is made, for example, to apply rates of death to the small numbers exposed to risk, for the sake of determining the number of deaths to be expected, the results will be fractions of a death at the different ages. Clearly the actuary cannot deal with such small numbers, because the deaths will occur as units, and under a life insurance provision, if one or two deaths occurred at very early ages, the system would be in difficulty, and on the other hand under an annuity scheme, if a few beneficiaries should live to extreme old age they would bankrupt the system.

Why
Necessary

Exactly how large a number would be required to permit of the development of a system on the actuarial basis would depend somewhat upon the nature of the system and some-

Number
Necessary

RETIREMENT OF PUBLIC EMPLOYEES

what upon the character of the service. A system involving only the contingency of death, which is the most certain and uniform, could probably be safely established on the actuarial reserve basis for a smaller group than could a system involving death, disability withdrawal and the salary scale. A small homogeneous staff with fairly uniform service experience, and drawn from approximately the same social group in the population, could be provided for more safely in a fund than could a somewhat larger group which included employees who differed widely in respect to salaries, occupations, and social groups. Everyone who is familiar with the actuarial rates that have been developed for different funds must be impressed with the fact that even the death rates vary materially. This fact is strikingly brought out in the actuarial report on the numerous New York City funds, in valuing which Mr. Buck found it necessary to use different death rates for the several branches of the city service because of those differences.¹ The other rates would be even more seriously affected, and a salary scale for a non-homogeneous small service would be a very uncertain factor. Because of the number of factors involved, the exact point of safety cannot be put at a certain uniform number. The advice of the actuary who has had an opportunity to study the detailed facts of the service must be taken and the point would be a very important one for consideration in any service having less than a thousand employees.

METHODS OF SECURING NUMBERS

Advantages of Centralized Systems

Centralized Systems. The difficulty of getting a sufficient body of employees to permit of the establishment of a stable reserve fund can generally be overcome by forming centralized systems. A state, for example, could found and operate a system in which all local governments within the state would be participants, or in which any local government desir-

¹ Report on the Pension Funds of the City of New York, Part II, by Mr. George B. Buck, New York, 1916.

SMALL SYSTEMS

ing to provide a retirement system would be a participant. The establishment of a single centralized system has certain marked advantages. It gives a broad foundation for the actuarial computations upon which the soundness of the system depends. It reduces the expense of administering the system, and insures better administration, because the state can employ a few high-grade people who will devote most of their time to the required work, whereas if each locality attempts to do it for itself more people will be concerned with the administration of the systems, but few of them will devote enough of their time to it to become properly qualified. Under a state system provision can be made, too, for freedom of movement from one locality to another or from one government organization to another. The principal advantage, however, is that the centralized state system permits the small local government unit to have an efficient system, cheaply administered, whereas by itself it would have to adopt an inferior device. The ideal solution for small services is therefore to get the central government to establish a general system common to all.

A centralized system of which the various local governments are members raises a new problem, that of dealing equitably with each unit. In many respects the problem resembles that of preserving equality of return among individual employees, which has already been considered under the heading the amount of the benefit in its relationship to salary in the chapters on the superannuation benefit (page 126) and on the disability benefit (page 194). If the centralized system is operated on the so-called savings bank principle, and if the amount of superannuation benefit is made dependent on the amount of the accumulated contributions paid by the employee or on his behalf, and if the disability benefit is an insurance of a fixed sum, or if an amount which a fixed premium will purchase, it would hardly seem as if serious friction could arise between the units as to the fairness of the device. If it developed that the disability rates

Equality
of the
Local
Participants

RETIREMENT OF PUBLIC EMPLOYEES

differed in communities of different sizes, it might be feasible to establish separate premium rates for each of the several classes into which the communities might be divided in respect to size; but the system could easily be made perfectly equitable. Serious differences might easily arise, however, as to the amount of the benefits to be provided and the division of the cost. It would seem as if such difficulties might be overcome by permitting the local units a considerable degree of freedom in determining the amounts which should be contributed by their individual employees and by the employing local government in the employees' behalf. The real function of the state in establishing the system might well be regarded merely as serving as an insurance carrier, bringing together all the units in a single organization large enough to give scope to the law of averages and to permit the sale of annuities and of insurance against disability. The minimum state contribution would be probably the cost of administering the system. Whether the state should do more is probably a question for local decision; but if it attempted no more it would avoid the difficult problem of equality of treatment for large and small communities.

An actuarially complicated system with forfeitures in event of withdrawals, and benefits based on salary, would in all probability give rise to friction between the units after the working of the system became well understood. It is hardly to be assumed that the salary scale for small communities would in the least resemble the salary scale for large cities, and doubtless the withdrawal rates would be very different for different types of communities. The time would probably come when the citizens of certain classes of communities and their employees would oppose the system on the ground that they were paying more than the cost of the benefits they were receiving and that certain other communities were getting more than they paid for. Such a system would introduce as between the units all the elements of inequality that it permits as between individual members.

Private Insurance Organizations. If the small government organization finds it impossible to induce some larger central government organization to perform the service of bringing together enough local units to permit of the sale of superannuation annuities and disability insurances it cannot undertake their sale itself, but must turn to some other agency which has a sufficiently large number of clients to permit it to deal safely in these benefits.² The local government can itself provide for the accumulation of funds at interest because that is a mere savings bank device, the safety of which does not depend on numbers, but it has to pay over the accumulations to a larger organization when annuities become due, as the payment of annuities requires scope for the operation of the law of averages.

Necessity
for Service

The natural agency for the small government unit to select is an insurance company. If it chooses itself to accumulate the funds, it would simply take the entire amount to the account of an employee when he retired and use it for the purchase from the company of an annuity. Such an arrangement would, of course, protect against old age only. It is perhaps questionable whether at this time a small local government could find an insurance company which would undertake to insure the employees against permanent disability not occurring in the actual performance of duty for an annuity payable throughout life under a policy which the company could not cancel. The dangers of fraud would be so great that the companies would hesitate to sell such policies, and the government selling them itself through its own retirement system has to exercise great care.

Old Age
Annuities

² "A small fund cannot undertake the liability of paying life annuities nor fixed sums payable at death, because the number of lives concerned is not large enough to eliminate the uncertainty of the liability in respect of each. Consequently, where the school institutes a fund which it retains in its own management, it must, unless it is very wealthy, avoid these uncertainties and restrict the fund to the character of a Savings Bank."—Departmental Committee on The Superannuation of Teachers: Report of the Committee on the Second Reference, British Parliamentary Papers, London (1914), Vol. XXV, p. 10.

RETIREMENT OF PUBLIC EMPLOYEES

Death
Benefit

If the local government desired to protect its employees against death by a special benefit over and above the mere return of the contributions, it could also purchase from the company insurance on the life of the employee either for the whole of life or until such time as he reached the retirement age and entered upon his annuity. The latter policy would of course be very much cheaper than the former, as has been indicated in the chapter on death in the active service from causes not arising in the actual performance of duty (page 254), and it probably better meets the needs of the employees, since more insurance can be carried when most needed for the same premium.

The
Federated
Universities'
Scheme

If the local government preferred not to undertake the accumulation of any funds itself it could adopt a system similar to that recently established for the Federated Universities of England.³ In this scheme each teacher within the scope of the system is insured with a selected life insurance company and the premiums on this insurance are paid annually. The amount of the premium under such a system could of course be paid entirely by the government, entirely by the employee, or by the two combined as the founders of the system may prefer. In the Universities' scheme three types of policies are offered:

1. Simple endowment insurance with profits or dividends. Under this policy the beneficiaries receive the face of the policy on retirement, or it is paid to his estate in the event of his death before retirement.
2. A deferred annuity policy with a return of premiums in event of death before the retirement age.
3. A deferred annuity policy without any return of contributions in event of death before the retirement age.

³ See Reports of the Advisory Committee on the Distribution of Exchequer Grants to Universities and Colleges in England, British Parliamentary Papers, Second Report (1912), Vol. XXII; Third Report (1913), Vol. XXI.

SMALL SYSTEMS

The third possibility gives the maximum amount for old age alone and may be called the single man's policy. The first is the policy which would be selected with the man with many dependents, though of course it yields a far smaller annual return than either of the others. All three policies are designed to mature at age 60.

Under such a system, if the employee resigns or is dismissed he can be given either the cash surrender value or the policy itself. In the English Universities' system if he leaves one university to enter another the policy is merely transferred and the new employing university assumes the premium payments that the former university had been paying. One of the grounds for adopting the system was to facilitate transfer from one university to another.

The Carnegie Foundation for the Advancement of Teaching is now considering offering to American universities a similar device, in which it will take the place of the private insurance companies, rendering the service without charge for administration and basing its rates on mortality tables drawn from the experience of the particular classes to which it applies.⁴

Against insurance with private companies as a device for providing a retirement system for public employees, four principal objections have been urged: (1) If the government compels insurance, it should guarantee the soundness of the system, and the government could hardly guarantee the soundness of a private company. (2) Private companies are sometimes conducted for profit. (3) Even in mutual companies the cost of doing business is an important factor. This objection is overcome in part if the private companies give a reduced rate in recognition of the fact that they are put to no expense for agents to secure the business and that the cost

Objections
to Private
Insurance

⁴ See "A Comprehensive Plan of Insurance and Annuities for College Teachers," by Henry S. Pritchett, President of the Carnegie Foundation, Bul. 9 of the Carnegie Foundation for the Advancement of Teaching, New York, 1916.

RETIREMENT OF PUBLIC EMPLOYEES

of collecting the premiums is comparatively low. (4) The device does not lend itself to the development of satisfactory provisions against disability at early ages. This fourth objection is perhaps the most difficult one to overcome, because at the present time disability insurance is dangerous, especially where the insurer has no administration control over the insured.

In spite of these objections resort to private companies seems the only feasible device if the small unit is unable to combine with other small units in rendering the service for itself.

CHAPTER XVIII

CERTAIN COMMON PRACTICES IN FINANCING A FUND THAT ARE OBJECTIONABLE

In retirement legislation provisions are frequently encountered that direct that all or a certain proportion of the revenue from certain specified sources shall be paid to the retirement fund. In some instances these sources of revenue have no connection whatsoever with the branch of the service for which the retirement system is established. The Teachers' Retirement Fund of the City of New York, for example, is given a certain percentage of the excise moneys, though obviously no relationship exists between the teaching profession and the amount of the excise tax. In other cases the revenues specially appropriated are directly affected by the administration of the service for which they are appropriated. Among such provisions may be mentioned payment into the police fund of fines levied against police officers for breaches of discipline, of a certain proportion of all fines levied on members of the general public for drunkenness or for offences where the police were the informers, and of certain fees for the performance of police functions. Proceeds from the sale of condemned property and unexpended balances from appropriations are other provisions of this character.

The
Practices
Described

The inclusion of such provisions is contrary to a sound public policy, because (1) they work against the maintenance of the fund on a proper actuarial reserve basis, (2) they prevent the exact cost of the retirement system from being known and appreciated by the taxpayer and (3) they may lead to improper administration of the service.

The
Objections
to the
Practices

The essence of the actuarial reserve system is to pay into

RETIREMENT OF PUBLIC EMPLOYEES

the fund each year the exact sum necessary to make assets meet liabilities. The amount of the revenue to be derived from these special revenues bears no relation to the liabilities that are incurred. A system therefore cannot be placed on a sound financial basis by the simple device of providing certain sources of revenue at the outset. The sums required will have to be considered each year and will have to be measured by the liabilities incurred in that year. It would of course be possible to provide these special sources of revenue and then annually to appropriate for any deficit, but the simpler device would be to pay the money from these sources into the general treasury and to appropriate the entire sum for the retirement system in one clear-cut item.

Anything that disguises the cost of the retirement benefits and tends to hide some of it under permanent appropriations is objectionable, because it increases the danger that the retirement system may be utilized for exploiting the public treasury. One of the chief merits of the actuarial reserve system is that it keeps the matter of cost constantly in the eyes of the employees and of the public. This advantage is very much reduced if any part of the required sum is a permanent annual appropriation from a fixed source. Under such a system the annual appropriation required to keep the system solvent, the one that appears in the appropriation bills, where it is subject to review and criticism, becomes only a part of the true cost. The danger of the establishment of a "pension graft" in retirement legislation can only be met by never permitting true cost to be in any way hidden.

Particularly to be condemned are any provisions that can possibly permit of the necessities of the retirement fund influencing the public servant in the performance of his duty. Permitting the pension fund, for example, to derive a profit from an arrest and conviction is so palpably improper that one wonders how such a provision could ever have passed a body that supposedly represented the interests of the general public. Allowing the fund to profit from the sale of condemned

OBJECTIONABLE COMMON PRACTICES

property may result in large bills for equipment and supplies which are in fact indirect contributions to the retirement system. The unexpended balance of appropriations is an equally objectionable source of revenue. Whenever the fund is in difficulties the temptation is to pad the estimates and to cut down the service to the public so that the unexpended balance will help solve the financial problem of the fund. The revenue from fines levied against the employees themselves is perhaps less open to objection on this score, but even in this instance cases of serious abuse can be easily imagined.

The one safe rule is to have all the appropriations made by the government for the fund appear in a single item, supported by an appropriate schedule showing the detailed facts regarding the fund. Only in this way can it be properly safeguarded against the abuses to which it is peculiarly subject. **The Rule**

CHAPTER XIX

PROTECTING THE PUBLIC FROM FINANCIAL IN- DISCRETION OF RETIRED EMPLOYEES

Necessity for Protection. General Provisions for Protection. Payment in Annuities: Funds Free From Attachment. Exception in Case of Resignation and Dismissal. Exception in Case of Large Annuities. Exception in Case of Death Benefits. Borrowing from Fund.

NECESSITY FOR PROTECTION

One of the principal objects sought by the public in establishing a retirement system is to prevent employees properly retired because of advanced age or disability,—and to a certain extent their dependents,—from becoming public charges. One of the reasons why a retirement system is necessary to accomplish this object is that in many cases the nature of the public employee's work is such that he does not develop business acumen in the matter of investments and that during the active years of life he does not have the opportunity to gain experience in working with his own money. This absence of experience continues of course throughout life; and if the main object of the public in establishing a system is to be realized, steps must be taken to prevent the employee, unfamiliar with business matters and investment, from losing the accumulations of his working years and becoming at the end a dependent upon public or private charity.

GENERAL PROVISIONS FOR PROTECTION

Payments in Annuities: Funds Free From Attachment. This object of safeguarding the public from unwise management on the part of the beneficiary is generally secured by providing: (1) that on superannuation or disability retirement

FINANCIAL INDISCRETION OF EMPLOYEES

the employee can take his benefit only in the form of an annuity and not in a lump sum;¹ and (2) that the employee's

¹ "The Committee have been advised that the only possible method of securing the benefit against such risks as would arise, for instance, on the insolvency of the member is the creation of what is known as a 'discretionary trust' whereby the Institution can in its discretion award the benefits to the member or his wife or any of them. Of course in the great majority of cases the Institution will exercise its discretion by giving the benefit directly to the member, but in a scheme of this magnitude it is necessary to provide for all contingencies. Thus the discretionary trust will also be useful in cases of mental breakdown. In such cases where the member may not be in a condition to manage his own affairs, it is important that the Institution should be able to administer the fund promptly and effectively in the best interests of the beneficiary. For similar reasons it is necessary that the policies should be held by the Institution, in order to guard against the risk of premature dissipation the benefit by mortgage or early sale."—Third Advisory Committee on Distribution of Exchequer Grants, British Parliamentary Papers, 1913, Vol. XXVI, p. 4.

"Annuities only should be used in making payments for any cause to the beneficiaries of the retirement system. As a venture in social insurance the scheme must have due regard for the protection of the beneficiary against old age and dependency. Payments of the total amount, in the form of a lump sum representing the present worth of the claims of the beneficiary are highly objectionable, because there is danger, and in many cases even probability, that the money will be lost either through unwise investments or unwise expenditures of one kind or another. However able some may be to take care of their own money, the state must protect against losing their savings those who are less capable of making investments. The principle of annual distributions, paid say in monthly or quarterly installments should be applied both to the accumulated savings of the teacher and to the pension added by the public. When a teacher has served long enough to become a risk on the fund, payments after withdrawal for any cause should be in terms of annual amounts certain to continue at least until the death of the beneficiary."—"The Teacher and Old Age," by C. A. Prosser and W. I. Hamilton, Houghton Mifflin Company, Boston (1913), p. 44.

The Departmental Committee on the Superannuation of Teachers (Report on the Second reference, British Parliamentary Papers (1914), Vol. 25, p. 16), said:

"Thirdly, they [existing retirement systems] are greatly deficient in the means which they adopt for protecting thriftless teachers against themselves. In most of the systems the teachers can realize (though often at a great sacrifice) the money which, according to the intention of the system, should be left to accumulate until his old age. In many of the systems he can do this merely by resigning his post; and he can then either take out the money standing to his credit in a school provident fund, or get into his own possession the insurance

RETIREMENT OF PUBLIC EMPLOYEES

rights under the system are unassignable and cannot be attached. In some cases, prevention of assignment and attachment have been attained by providing for the payment of benefits to trustees under what is sometimes termed a spend-thrift or discretionary trust.

Commuta-
tion of
Pension

Exception in Case of Resignation and Dismissal. In some systems, "commutation of pensions," as it is called, has been permitted and the employees have been able, if they so choose, to take the entire present value of their benefits in one lump sum. The weight of the evidence seems, however, to be against the practice, because in many cases it has resulted in loss. It is, however, the general practice in the event of voluntary resignation or of dismissal, especially in the case of employees withdrawing in the early years of life or in the early years of service, to make a cash payment that severs all connection between the employee and the system and this seems the wiser course. If, however, the employee resigns or is dismissed after reaching fairly advanced age, it might prove advisable to make all the payments in the form of annuities, with payments to begin at once or with payments to begin when the employee reaches the minimum superannuation age. The public would thus be protected against the dissipation of the accumulation, and to a certain extent the objections against benefits in event of withdrawal, that it places a cash premium on resignation, would be overcome.

Exception in Case of Large Annuities. If any one employee is entitled to an exceptionally large benefit, the regulations of the system might well provide that he may be required to take, in lieu of part of it, the equivalent present value

policies which have been taken out for time and which have a certain surrender value. Without some community of action and possibly some legislation, it is difficult to prevent this power being placed in the hands of the members of these pension systems; but, nevertheless, it is a great defect in a pension system which is designed to furnish a means of subsistence in a teacher's old age that the teacher should be enabled to forestall the benefits and apply them to meet his difficulties before old age is upon him."

FINANCIAL INDISCRETION OF EMPLOYEES

of that part either in a lump sum or in a certain fixed number of annual payments, and that the balance be paid as an annuity. Very large annuities on a single life may constitute an element of danger to the fund, because generally the number of employees drawing such annuities is not large enough to give the law of averages an opportunity to work, and if the one or two employees receiving the large annuities should happen to live to extreme old age, the payments made to them might constitute a serious drain on the fund. The present value of part of their annuity would be the exact value of that part figured on the basis that the man will live, roughly speaking, the average number of years. If he lives longer than the average he would have profited from the annuity, whereas if he lived only a short period, he or those who are the beneficiaries of his estate have profited from the payment of the lump sum.²

In some systems, this danger from a few very large annuities has been overcome by placing a maximum limitation on the amount of the benefits. If the system is independent of salary, or is directly dependent on salary, this limitation generally takes the form of a direct provision that the benefit shall not exceed so much. Under a system directly related to salary, the natural provision would be that the portion of salary over and above a certain maximum shall not be subject to deductions. In the system directly dependent on salary, the establishment of a maximum limitation may tend to offset any injustice to the lower paid men, and may even go so far as to make the few men who rise to the top pay relatively more for their benefits than any other class, but this inequality may be overcome in a contributory or partially contributory system by placing a maximum limitation on the amount of salary that shall be subject to deductions.

Exception in Case of Death Benefits. Another case in which lump sum payments may be preferable to annuities

² See "Fundamental Principles of Pension Funds," by J. J. McLaughlan, "Transactions of the Faculty of Actuaries" (1908-1909), p. 221.

RETIREMENT OF PUBLIC EMPLOYEES

arises when an employee dies, and the amount due him under the system is so small that it will not purchase an annuity of any size for the widow and children. More good can frequently be done in such instances by making the whole amount available at once to keep the family together until readjustments can be made, for example, until some of the children can assist in the support or until the mother can find employment.³ As was discussed at length in Chapter VIII in regard to a death benefit, the main principle seems to be to preserve flexibility and to permit the employee by will, if he so desires, to determine how the benefits shall be applied.

BORROWING FROM FUND

Without
Security

Under a wholly or partly contributory system, arguments are sometimes advanced for some arrangements whereby the employee can borrow against his interest in the system in event of illness or other misfortune, just as under a modern life insurance policy the insured may borrow a certain part of the legal reserve by paying interest on it. The force of the arguments in favor of such a provision are obvious, but they

³ The president of the customs and annuity benevolent fund gave the following testimony before the Commission on Civil Service Superannuation (British Parliamentary Papers, 1903, Vol. XXXIII, p. 114):

3197. "Then in your opinion, from the point of view of the deduction, is it better for her [the widow], to have the annuity or to have the chance of one-third of the capital sum?—I think it is better not to have the annuity and we had at one time a rule that one-third portion should be sunk in an annuity for the widow, and I was myself the means of getting that knocked on the head."

3198. "Why? Would you give me your reasons?—Well, my reason was that in many cases the widow did not deserve it, and in other cases it was found to be much less for the advantage of the family that the widow should have a small annuity, which would be generally very small, than that there should be a lump sum of money available for putting out the children and putting them into the way of earning money for themselves. On the whole, the benefit to the family was I considered very much greater and as a matter of fact it is so found, because any man, if he pleases, can say, 'Let one-third of my insurance be sunk in an annuity for my widow.' He is not prohibited from doing it if he thinks best, but nobody does think it best."

FINANCIAL INDISCRETION OF EMPLOYEES

are very much weakened if the service regulations governing sick leave are broadly conceived as a part of the system, so that the salary of the employee is still available for the family in case he himself is ill. The principal catastrophe which would properly justify a loan secured by the reserve under the system would thus be provided for without resort to so doubtful an expedient.

The expedient is of doubtful wisdom because its introduction might defeat the principal objects of the government and of the public in establishing the system. In the absence of a compulsory retirement age, the employee whose accumulations under the system had been heavily borrowed against to meet emergencies would have no means of purchasing a retirement allowance and would therefore be continued in the active service by naturally sympathetic administrators regardless of the kind of work he might be doing. If a compulsory retirement age were included in the system, he would be turned out to be supported by public or private charity. The expedient might lead, moreover, to grave abuse by some employees who would resort to fraud to obtain immediate possession of their funds. Any machinery to prevent fraud would have to be fairly elaborate and expensive and would require more or less minute examination into the personal affairs of the applicants.

If such a device is to be introduced, it would seem advisable to place strict limitations on the amount that can be borrowed, or perhaps better to limit borrowing to the amount by which the accumulation exceeds a certain minimum. The wiser course, however, would appear to be to regard meeting of these temporary emergencies as being beyond the scope of the retirement system, and to safeguard the retirement system so that it will provide for the main dangers which it was created to meet.

Borrowing from the fund on security which would be regarded as satisfactory by a conservative financial institution is another matter that deserves mention. The suggestion has been made that members should have the privilege of borrow-

With
Security

RETIREMENT OF PUBLIC EMPLOYEES

ing from the fund at the rate of interest the fund is earning, if they give proper security entirely independent of their equity in the retirement system itself. Their equity would not be impaired unless they failed to repay the loan and the security deposited proved of insufficient value to cover it. If a member desired to buy a house, for example, and had saved enough entirely outside the fund to make a reasonable initial payment on it, the proposal is that he should have the privilege of borrowing the balance of the purchase price from the fund by giving it a first mortgage on the house and that he should pay on the loan that rate of interest at which the fund was placing its money at the time. To some it appears unjust that the employees shall be compelled to invest in a fund paying a relatively low rate of interest, and then have to borrow on good commercial security at a higher rate. A strong argument can, in fact, be advanced for having the assets of the fund invested in such a way that, other things being equal, they advance the interests of the employees as a class. If the extra cost of investing the money in security offered by individual members is borne by the member concerned, the suggestion seems to deserve most careful consideration.

CHAPTER XX

CONCLUSIONS

Scope of the Chapter. A Retirement System Necessary. No Model System Universally Applicable. System Must Be Applicable to Future Entrants. Benefits Part of Compensation for Future Entrants. Benefits Must Meet Employees' Needs. The Contingencies to Be Covered. *The Conditions Upon Which Benefits Are to Be Granted.* Benefits to Be Granted as Rights. *The Conditions of the Superannuation Retirement Benefit.* Compulsory Retirement Provision Necessary. A Permissive Superannuation Age Below the Compulsory Age. Superannuation Conditions to Be Based on Age. The Exact Ages to Be Selected. *The Conditions of the Disability Benefit.* *The Amount of Benefit:* Not to Be Discretionary. In Relation to Salary. The Amount of Superannuation Benefits in Relation to Economic Need. The Amount of the Disability Benefit. The Amount of the Withdrawal Benefit. The Amount of the Benefit: Death in the Active Service. Amount of Benefits: Death After Retirement. Amount of Benefits: Death or Disability in Actual Performance of Duty. *The Cost of a Retirement System.* Distribution of Cost Among Individuals. The Division of Cost Between Government and Employees. Indirect Contributions of Government. *The Organization and Management of Fund.* The Actuarial Fund Preferred. Necessary Safeguards. An Actuary Required. Treatment of Small Services. Indirect Appropriations Undesirable. Protecting System from Financial Indiscretion of Employees. *The Present Employees.* Six Differences Between Present Employees and Future Entrants. Present Employees Must Be Specially Provided for. Different Classes of Present Employees. Benefits for Past Services,—Employees Retired Immediately. Benefits in Respect to Past Service,—Employees Continued in Active Service. Benefits for Future Services of Present Employees. The Actuarial Deficit on Creating a System.

The Scope of the Chapter. In dealing with a subject such as this one of retirement systems, that involves many controversial points and has only within a comparatively few years been made the subject of really scientific study, a writer naturally feels some reluctance in preparing a chapter entitled "Conclusions." If he were to confine himself to stating as conclusions only such points as have been established beyond

Conclusions
Only on the
More
Important
Points

RETIREMENT OF PUBLIC EMPLOYEES

question, it is doubtful if he could write much, if anything; yet in this day of many books and many problems he has to recognize as legitimate the demand for a reasonably brief statement of fairly definite conclusions on all the more important points at issue. To prepare such conclusions he is forced to abandon as his ideal an unbiased, academic attitude, and to take his position on one side or the other of each controversy. Conclusions regarding such a subject are necessarily in a large measure personal. No one realizes more fully than the writer, moreover, that retirement systems are in their infancy, and therefore he has no desire to be dogmatic. For the same reason, he is far more inclined to give weight to soundness of theory than to preponderance of precedent. Since so many existing retirement systems, both public and private, are financially unsound, he would prefer to face the charge of relying too much on theoretical analysis than that of giving too great weight to precedents. From the general point of view thus indicated, the attempt is made in the remaining pages to indicate with reasonable brevity what seems to be the more promising course to pursue in dealing with each of the more important points involved in the problem of retirement legislation. A brief statement of the reasons which seem to indicate the wisdom of that course is given so that the reader who has only time for the conclusions can have some basis for judging of their fairness.

Soundness
of Theory
Given
Greater
Weight
Than
Precedents

Permanency
of Tenure
Necessary

A Retirement System Necessary. In most branches of the public service, reasonable permanency of tenure is necessary if suitable men are to be attracted by the positions offered and induced to remain in the employment of the government throughout their active careers, becoming constantly more experienced and more valuable. The case in favor of permanency tenure, whether it be considered from the point of view of the public, of the government or of the employees, is so obvious and so overwhelming that it is entirely unnecessary to prepare a statement of the grounds for reaching the con-

clusion that in most branches of the public service it is imperative.

The laws of nature make superannuation flow inevitably from permanency of tenure. To perhaps a lesser degree nature may be responsible for these cases in which disease or accident robs a man of his efficiency while he is yet too young to be classed as superannuated. Much can probably be done toward preventing accident and disease and even toward delaying the onset of old age, but for practical purposes at the present time it is safe to say that both superannuation and disability can be regarded as the inevitable accompaniments of permanency of tenure.

Superannua-
tion and
Disability
Accompani-
ments of
Permanent
Tenure

The power of dismissal, unaccompanied by power to grant a retirement allowance, is not generally exercised in case an employee loses his efficiency because of advancing age, accident or disease. The responsible administrative officers have no financial interest in the product of their office and have no particular incentive to dismiss men because of loss of efficiency. To exercise the natural instincts of human kindness in retaining the superannuated and the disabled on the active rolls, so long as they are able to fulfill the minimum attendance requirements costs the administrators nothing, and protects them from attack from the employee's friends. The unwritten law of the service, the unwritten terms of the contract of employment, therefore, become permanency of tenure so long as the employee is able to fulfill the minimum attendance requirements.

Superannu-
ated and
Disabled
Retained
on the
Active Roll

In the absence of an adequate retirement system, most public services affording permanency of tenure operate on a quasi-benefit system, giving to the superannuated or the disabled employee full salary at the highest rate he has earned, provided he can come to office or can be brought to office, whereas it will give him nothing whatsoever if the accident or the disease from which he suffers prevents his attendance upon his duties. The question of an extravagant benefit or of no benefit whatsoever turns therefore not on the employee's efficiency

nor on the service which he has rendered in the past; but merely on whether he can register an appearance at his duties.

Retention of
Superannu-
ated and
Disabled on
the Active
Roll Un-
economic

The cost of operating on such a defective benefit system cannot be determined. Elaborate computations can be prepared to show what proportions of the salaries of employees of advanced age are regarded as earned and the difference between the amount paid and the amount earned can be labeled the cost of superannuation. It is part of the cost; but no statistical device exists for measuring the indirect losses that flow from keeping an employee in a position which he is incompetent to fill. If an employee in charge of an important government undertaking becomes superannuated and is retained improperly, the cost of his retention may far exceed the entire appropriation for that undertaking. The teacher, and the physician watching over matters of public health, may if disabled cause a loss to the community which bears no relation whatsoever to the salary which they are receiving. Retention of the superannuated and the disabled may block the avenues of promotion and lessen the speed of work, and thereby destroy that morale which is essential if the public service is to be well administered. Losses of this kind cannot be measured. They have been understood by many public administrators and by many managers of large private corporations, and the attempted solution in practically all the foreign countries and in an increasingly large number of corporations has been the establishment of retirement systems.

The Only
Remedy
for the
Government

The establishment of a retirement system seems to be the only remedy for that situation which naturally exists in the public service in its absence, because it alone preserves permanency of tenure and recognizes that administrators in governmental offices have no inducement to deal harshly with the disabled and the superannuated, but on the other hand have natural inclinations to keep them on the active roll as long as possible unless other provision is made for them.

If a retirement system is adopted which must operate, in all its details, in the full light of publicity, so that the danger

CONCLUSIONS

of organized effort to secure improper retirement allowances is largely eliminated, it may be made an instrument of great social value to the public. Not only will it improve the character of the public service, but it will be a valuable agency of social insurance providing systematically for the care of the old and the disabled eliminated from the public service and possibly to a limited extent for the care of the dependents of deceased public employees.

A Valuable
Agency of
Social
Insurance

The employees will find that an equitable system, established with due respects to their rights, furnishes them at cost, protection which they could secure only with great difficulty, if at all, through private arrangements. It will also tend to improve the working conditions in the government by opening the avenues of advancement, and by giving an employee a wider outlook and more inducements for self-development.

Benefits the
Employee

No Model System Universally Applicable. Since an adequate retirement system properly administered would without doubt be advantageous to the government, the employees, and the public, the important question for consideration is, "What is an adequate retirement system?" Unfortunately one cannot draft a model system which would necessarily be satisfactory for all public services. An ideal retirement age for policemen and firemen, for example, would be anything but ideal if applied to clerks. A uniform "flat" pension alike for all might be an excellent provision for a homogeneous service in which all enter young, serve about the same length of time, and progress at practically uniform rates of salary advancement, but it would be probably a total failure in a complex service. In a book of this type the most that can be attempted is to recognize the questions involved and the general principles that apply; to others familiar with the detailed requirements of the service must be left the task of applying these principles to that service. In general, however, it may be said that an adequate retirement system is one that fulfills

What is an
Adequate
Retirement
System?

RETIREMENT OF PUBLIC EMPLOYEES

the requirements of that branch of the public service to which it applies and is at the same time fair to the employees as a class and to individual employees, satisfactory to a public appreciative of the potential social utility of such a system, and financially sound.

System Must Be Applicable to Future Entrants. The employees who are to enter the service after the system is established, and not the present employees who are already old, are the class that the legislators should have primarily in mind in establishing a retirement system. Much trouble has arisen in the past from failure to distinguish between the immediate superannuation problem and the real retirement system problem. The employees who have already grown gray in the service are entirely different from the future entrants. They have escaped the dangers of early disability and of early death and have passed the age when they have to make decisions regarding remaining in the government or resigning to enter other work, and consequently to them the important benefits in a retirement system are those provided in the event of superannuation or long service with possibly some suitable allowance to the widow, in event of death soon after retirement; they cannot appreciate the importance which future entrants will attach to benefits in event of withdrawal or in event of early death or disability. They cannot contribute any material part of the cost of their own retirement. To them a retirement benefit will be in the nature of a special reward for long and faithful service that is entirely over and above the compensation agreed upon for their services. Consideration of retirement allowances as granted to the present elderly employees gives, therefore, an entirely erroneous impression of the true nature of the retirement system. For the present old employees it is mainly a device for rewarding especially meritorious cases and for relieving distress. For the future entrants it is a system of social insurance operated by the government primarily in its own interests and supported by the

The Old
Present
Employees

Future
Entrants
and Young
Present
Employees

CONCLUSIONS

employees. The younger present employees resemble the future entrants more closely than they resemble the elderly present employees. In a few years the present elderly employees will have passed on and in a few more years the employees who entered prior to the establishment of the system will be comparatively rare. The success of the legislation therefore depends on the adequacy of the provisions for future entrants. It would in fact be wise to legislate in the first instance for the future entrants and then to adopt a distinctly temporary system for such present employees as could not be treated substantially as future entrants.

Benefits Part of Compensation for Future Entrants. Since the real retirement problem concerns the employees who enter the service after the establishment of a system, it becomes extremely important to examine the statement just made, that as applied to future entrants a retirement system is a social insurance device established by the government primarily in its own interest, but operated at the expense of the employees. If this conception of the nature of the system can be accepted as sound, it vastly simplifies many of the perplexing questions of equities and social ethics that the general problem presents.

That the cost of the system is borne by the employees is the only part of this statement that needs detailed consideration, because the resemblance to social insurance, if not at once apparent, becomes so on considering the contingencies of life that are involved. The true incidence of the cost of the system cannot be determined, in respect to future entrants, by the simple device of providing in the law that it shall be borne entirely by the government, or partly by the government and partly by the employees, for it is settled by the economic forces that govern wages, or as it can be more significantly expressed in dealing with the public service, by those economic forces which govern the quality of the employees which the government can secure for the compensation it offers to pay. General experience tends to show that even when the

Social
Insurance
for Future
Entrants

Incidence
of the Cost
Determined
by Eco-
nomic Forces

RETIREMENT OF PUBLIC EMPLOYEES

Benefits
Included
in the
Compensa-
tion

government assumes all the cost of the system, the value of the retirement benefits, or perhaps more exactly their supposed value, is, as a matter of fact, taken into consideration in determining the amount of salary which will be attached to a particular position. Legislators and administrators will naturally rely in part on the attracting power of the promised benefits in getting the men they want at the salaries they offer. Candidates for positions will naturally consider the benefits in entering the competition for vacancies, men who would not compete for the salary alone will compete for the salary plus the promised benefits. Men once in the service who would resign if there were no benefits will be held because of them. The kind of employees which the government will get and keep under an honestly competitive system of selection will depend not solely on the money wages paid into the hands of the employees for immediate use, but upon the general conditions of service, of which the actual wages forms but a part, though of course a highly important part. Since better conditions draw better men, economic forces tend to place the ultimate burden on the employee; if the government attempts to carry it, the result in the long run is an equivalent improvement in the type of employees secured. The real incidence of the cost of a retirement system in the care of employees who enter the service after the establishment of the system is placed by economic forces on the employee. The benefits offered by the system become part of his compensation for the services rendered.

Ultimate
Burden
Placed
on the
Employee

Benefits Must Meet Employees' Needs. If this economic analysis be sound and the employees must ultimately bear the cost of the benefits, the conclusion is abundantly justified that the system must be broadly conceived as one of social insurance devised for the employees' protection. The best interests of the government manifestly lie in paying such compensation as it offers in a form that will at once protect it from the inevitable losses flowing from superannuation and disability

CONCLUSIONS

and at the same time prove attractive and socially useful to its employees. The object of the government should not be to tie an employee to a particular job by making him sacrifice his provisions for old age if he leaves it, but to improve the general conditions of service, so that each employee shall, in so far as possible, have maximum opportunity for development, whether that development carries him beyond the confines of the service he happens to have entered or not. The broader the opportunities which the public service offers to men, the better employees it will get, and it can scarcely profit in the long run by curtailing the opportunities to be reached through its positions for the immediate narrow advantage of holding men in positions which they would leave except for an arbitrary device. Similarly the government must not seek to achieve its own more immediate objects—the elimination of the superannuated and the disabled—too cheaply through the device of forfeiture of all rights in the system in event of death in the active service, because such a provision breeds discontent and from the point of view of the employees is an unfair method of distributing the fund formed from their deferred pay. The general rule should be to meet the needs of the employees.

The Contingencies to Be Covered. The system established to be adequate should therefore provide for benefits in event of the following contingencies

1. Superannuation or advanced age.
2. Ordinary disability, or loss of ability due to accident or disease occurring before the employee has satisfied the requirements for a superannuation benefit.
3. Withdrawal from the service, whether by
 - a. Resignation or
 - b. Dismissal.
4. Death in the active service.
5. Death after retirement, if the employee on retirement

RETIREMENT OF PUBLIC EMPLOYEES

so elects, through the establishment of optional methods of settlement.

Accidents in Per- formance of Duty

If the service is such that accidents or diseases directly due to the actual performance of duty are sufficiently numerous to warrant that course, special benefits should probably be included to provide for the contingencies of

1. Disability due to the actual performance of duty.
2. Death in the active service due to the actual performance of duty.
3. Death after retirement because of disability due to the actual performance of duty, the death being directly attributable to the same cause as the disability.

Some question may arise as to whether these cases should not be provided for under general workmen's compensation laws. It would seem, however, that the special needs of the service could be better met by a comprehensive retirement system covering all contingencies and properly correlating the benefits than by bringing certain of the contingencies under a law designed for a class somewhat different from public servants. Care must of course be exercised to see that the provisions under the retirement act at least comply with the standards established by the compensation act in so far as they are applicable to the same class.

Cases in Which no Benefits Should Be Granted

The conclusion can be definitely drawn that no special benefit should be granted in the event of

1. Inefficiency from causes other than accident, disease or old age.
2. Abolition of positions or reorganization of office because of changes in the work of the government.

If the employee leaves the service for one of these causes he should receive from the retirement system only the ordinary or regular withdrawal benefit.

CONCLUSIONS

The general reasons for these conclusions have in the main been sufficiently indicated, but some explanation will perhaps be demanded regarding the ground for a benefit in event of dismissal and, possibly from another set of readers, for the failure to recommend any special allowance in event of abolition of position or reorganization of office.

Unless a benefit in event of dismissal is provided, a retirement system adds to the reluctance of administrative officers to eliminate unsatisfactory employees in that way. If an employee with fairly long service becomes unsatisfactory, say, for example, because of intemperance, the administrator will hesitate to dismiss him if dismissal means loss not only of immediate wage but also of the employee's provision for old age. If a benefit on resignation is provided the lenient administrators and those susceptible to pressure from the employee's "influence" will let unsatisfactory men go by the resignation avenue, with the result that discrimination will arise. Further discrimination will come from the fact that the financial penalty involved will vary in different cases, depending on how long the employee has been in the service. An old employee's equities in the retirement benefits may amount to several thousand dollars, and it is very questionable whether authority to impose such penalties should be placed in the hands of administrative officers. Their power to reprimand, to furlough, to withhold promotion, to reduce in salary, and to dismiss is sufficient to permit them to maintain proper discipline, and even now no device has been perfected to make sure that these powers are fairly exercised. To give them further power to deprive an employee of his provision for old age, compulsorily saved out his compensation, is a doubtful administrative expedient. If the employee has been guilty of vicious criminal misconduct the proper tribunal for the trial of the case is manifestly the duly established criminal courts where the employee may have his constitutional rights and where the penalty imposed will be the legal penalty. The public can scarcely consent to turning over to administration officers, not

Forfeiture
of Benefits
at Dismissal
a Doubtful
Expedient

RETIREMENT OF PUBLIC EMPLOYEES

**The Rights
of Employee
at Dismissal
Must Be
Respected**

properly equipped with machinery for doing justice, the right to impose a special penalty for an offense over and above the right to terminate immediately the contract of employment. Socially the retirement benefits are not merely the provision for the employee as an individual, but for him and his dependents. The family's need for its savings is at a high point when the principal breadwinner is dismissed from his position, and a system of compulsory savings that automatically deprives the family of its savings in this contingency is socially indefensible. A socially desirable provision in a retirement system might possibly be one that permitted the family of the employee in the event of resignation or dismissal to file with the administrators of the system a claim to the employee's equities which would operate to suspend their payment until the proper court having jurisdiction over domestic relation could pass on the case and issue the necessary court orders. Without further limitations the rights of the employee in event of dismissal should be fully respected to the mutual advantage of the government, the employees, and the public.

**No Benefits
in Case of
Abolition
of Position**

Since the ordinary employee devotes all his time to the government service he loses touch with outside avenues of employment, and since much of the work of the government is monopolistic in character, his knowledge of that work, which is his principal stock in trade, is of no value to anyone except the government. On this ground a claim is frequently advanced that the retirement system should systematically insure against loss of position through changes in the requirements for which the employee is in no way responsible. The conclusion against the wisdom of such a benefit is based not on a belief that such employees deserve no special consideration, but on the belief that the retirement system is not the proper medium for supplying it. The conclusion of such a device in the English system led to abuse because it furnished a way for retiring on specially advantageous terms employees who were inefficient without excuse and for reorganizing an

CONCLUSIONS

office to eliminate an unpopular clique. Cases in which change of work throw employees out apparently ought to be taken care of by providing that when employees become redundant the administrators of the retirement system shall have power to place them in positions in other offices which are within their capacity. If wholesale reorganization is undertaken, the question of caring for the displaced employees should be specially considered in connection with the legislation authorizing the change. The contingency is one that cannot properly be met by a retirement system since it is sporadic and each case presents its own peculiar features.

THE CONDITIONS UPON WHICH BENEFITS ARE TO BE GRANTED

The conditions upon which benefits are to be granted constitute a complex problem the solution of which depends largely upon the nature of the service to which the system is to be applied. Certain fairly definite conclusions can, however, be drawn if one makes the customary reservation that there are exceptions to all rules. The conclusions given may be termed *prima facie*, for it can at least be said that the burden of proof lies on those who would follow some other course.

Benefits to Be Granted as Rights. All benefits under a retirement system should be granted as of right to the employee when he has fulfilled the requirements established in the law or under it, and they should never be granted on the discretion of the administrators. This conclusion is so abundantly supported both by the theoretical analysis that the employee has earned the benefits and by the overwhelming evidence of the English experience that one questions whether even in an ordinary disability benefit a discretionary feature would be advisable in an effort to reduce its attractiveness and thus prevent fraud. Maximum and minimum limitations on the amount of benefit to permit of recognition of the specially meritorious are within the ban; and such recognition if de-

RETIREMENT OF PUBLIC EMPLOYEES

sired must be made by basing benefits directly or indirectly on salary and raising salaries according to merit. The retirement benefits are not to be used for disciplinary purposes. When an employee is retiring it is too late to punish him for a past offense, if punishment is to be educational. Experience shows that fear of possible reduction in retirement allowances in the future acts alike on the just and the unjust and instead of working for the advantage of the government invariably produces general dissatisfaction. However desirable a discretionary feature may sound as a disciplinary measure to those who like to give administrators maximum control over their subordinates and who accept the theory that retirement allowances are unearned by the employee and are merely rewards for meritorious service or charitable grants, it must always be remembered that the exercise of discretion in the public service is subject to those forces termed "influence." The ramifications of influence that one discovers in studying the experience of retirement systems that give discretionary benefits are so pernicious that it is impossible to over-emphasize the importance of granting benefits as a right. No man should have a discretionary power over a woman's allowance under a retirement system; no government official should be in a position where his performance of his duties can be affected by the fact that any man or group of men have power to deprive him of his provision for himself and his family in the event of the happening of one of the catastrophes of life.

THE CONDITIONS OF THE SUPERANNUATION RETIREMENT BENEFIT

Compulsory Retirement Provision Necessary. A compulsory superannuation retirement provision should be included in all systems devised for the public service, because without such a provision, a system fails to accomplish several of the important purposes for which it is designed. Some employees, although superannuated, will desire to remain in the active

CONCLUSIONS

service, and this desire may be fairly general if the superannuation benefits are small in comparison with active salaries. Although the provision of benefits will encourage administrators to suggest retirements in some cases, it will not eliminate those forces that operate in the absence of a system and many employees will be retained after their usefulness is gone.

Unfortunately the difficulty of removing a superannuated employee from a responsible position is probably greater than the difficulty of removing one from a routine place, yet the damage caused by retaining the employee in the upper position may be almost infinitely greater. Not only may such an employee administer the undertakings submitted to him poorly, but he is choking the avenues of advancement. One vacancy at the top involves advancement all down the line. Stagnation in promotion breeds inefficiency and lack of interest, whereas opportunity for advancement keeps up the morale of a force. The employees on entering a service ought to be glad to agree to leave when they have attained the fixed age, in consideration of this one fact, that such a provision results in some flow of promotion. Too frequently in the public service the entrance salaries are comparatively high and the ultimate salaries comparatively low. Coupled with this situation is the American practice of reserving the better-paid positions for political appointees who may or may not know anything at all about the work they are to undertake. Many employees after accepting a government position find it difficult to leave because few private employments offer so large an entrance salary and yet they have little incentive for enthusiastic application because the prospects of reward are remote. This problem of salary scales for public service is one of great importance in promoting efficiency in public business. It cannot be solved entirely by a retirement system, but the inclusion of a compulsory retirement provision operates in that direction. Care must, however, be exercised to place this compulsory age at a point sufficiently high so that competent men will not be turned off in large numbers.

Damage
Caused by
Retaining
a Superan-
nuated
Employee

RETIREMENT OF PUBLIC EMPLOYEES

Permission
to Continue
After Com-
pulsory Age

An objection is not infrequently raised against the compulsory age that in exceptional cases it deprives the government of the services of the very men it may need most. The English device of permitting men to be retained after the compulsory age for an additional period of not exceeding five years under exceptional circumstances should be mentioned in this connection. Honestly administered, and carefully protected by full provisions for publicity and by some curtailing of aggregate compensation, it undoubtedly has merits, especially as it permits fixing the general compulsory age of retirement at a somewhat lower point than would be just without it. If one could be sure that political influence would not be used to make the exception the rule, and that only those men who were especially well qualified would be retained, the device would appear to be one which should come into general adoption.

A Permissive Superannuation Age Below the Compulsory Age. Men fail at very different ages and the ordinary superannuation conditions must allow for that fact by establishing an age, probably not more than five years below the compulsory age, on the attainment of which an employee may claim his superannuation benefits as a right if he elects to retire, or if he is asked to retire, or if he is dismissed. Whether such a provision is necessary in athletic services is perhaps more open to doubt than in the case of a sedentary service. For such retirement he should not be required to establish any unfitness. To prevent him from exercising this right unless he believed it reasonably necessary, and to recognize the equities as between employees, the amount of the benefit which he would receive should be considerably lower than the benefit payable at the compulsory age.

Superannuation Conditions to Be Based on Age. The conditions for the superannuation benefit should in practically all departments be based on age and not on length of service. The

CONCLUSIONS

relationship between age and the failure of strength and ability rests on natural laws; whereas in an ordinary branch of the government work, length of service bears no necessary relation to ability, except in so far as it generally follows that long service means fairly advanced age. The employee who enters the employ of the public late in life may be superannuated after short service, whereas he who enters young may have many years of service to his credit and still be the best man in his department. Statements are occasionally made that a particular service is peculiarly wearing and that a certain number of years in it destroys a man's usefulness. Adequate evidence to support the contentions is generally lacking. Service conditions where established have frequently led, moreover, to the voluntary retirement of employees still in the prime of life and to the retention of superannuated employees in the active service, because they have not yet satisfied the retirement conditions. The presumption is almost conclusive in favor of conditions based on age and against conditions based on service.

The Exact Ages to Be Selected. The exact ages to be selected will depend on the nature of the work which the employees are called upon to do and the extent to which it proves possible to correlate the different branches of the government so that men from the athletic service will be transferred to sedentary services as soon as their athletic powers begin to fail. If no such correlation proves feasible, comparatively low ages have to be established in athletic services, and the benefits have to be provided on the assumption that the retired employees will find sedentary occupations for themselves after retirement. If the service is sedentary, higher ages have to be set and the benefits have to be provided on the assumption that in the average case the retired employee will not take up any new business after retirement. In considering the ages the parties must never lose sight of the question of costs. Low retirement ages mean extremely high costs

Difference
in Athletic
and
Sedentary
Services

RETIREMENT OF PUBLIC EMPLOYEES

and high ages extremely low costs. A matter of a year or two is never one to be treated lightly.

Differences
Between
Men and
Women

The English system for civil servants permits superannuation retirement at sixty and compels it at sixty-five with the exception that under special circumstances an employee may be retired to age seventy. Some systems have permitted women in sedentary occupations to retire at fifty-five, whereas the men could not retire until sixty. A question may be raised whether an arrangement for special leave of absence for women, possibly for a year or more, either at full pay or at reduced pay, might not relieve the nervous strain to which their earlier breakdown is frequently attributed and permit them to return to active service. The statistics are conclusive that they are longer lived than the men, and it is very doubtful if the conditions leading to their earlier retirement are permanent and result in more than temporary incapacity. One would be inclined to question whether the ages established by the English system were not the minimum ages for a sedentary service and whether if no provision is included for retention beyond the compulsory age in exceptional cases it might not be wise to raise both the permissive age and the compulsory age from three to five years, making them either sixty-three and sixty-eight or sixty-five and seventy.

Merely a
Milestone at
Which No
Proofs of
Disability
Are
Required

In deciding upon ages for the superannuation benefit, two points must always be kept in mind. The first is that a disability benefit is the proper device to take care of cases in which accident or disease destroys an employee's earning capacity before he has satisfied reasonable conditions for a superannuation benefit. The age conditions for superannuation retirement, in an adequate system, do not establish an age before which no man may retire, but merely an age before which no man may retire without full proof that he is disabled by accident or disease. The minimum permissive age is established as the milestone at which the presumption of declining ability is sufficiently strong to permit of the waving of the strict requirements for concrete proof of disability.

CONCLUSIONS

The second point is so fundamental that its importance can hardly be overemphasized. A retirement system is not a device created to give able-bodied, competent employees a period of leisure at the end of their lives. The whole weight of the evidence regarding male employees, at least, is that the great body of them have no desire for the creation of such a period, and that however attractive the prospect of retirement to leisure may look when one is young or in early middle life, it loses its attractiveness as one grows older. The ambition becomes to stay in harness to the end and the man who is retired because he has reached the compulsory age immediately seeks some other employment. Emphasis once again must be placed on the fact that the retirement device is an insurance system not created to give a particular class a leisure period at the end of life, but to protect them from the danger of loss of earning capacity due to advancing age.

Not a
Device for
Giving
Able-bodied
a Leisure
Period

The cost of this insurance is borne by the employees themselves, and consequently as a class they must be on their guard against those of their leaders who adopt the view that the purpose of a retirement system is to reward faithful servants with a "chance to rest" and that the conditions established (this type of person generally argues for a service condition) should be placed sufficiently low so that "we may get our pensions while we are still young enough to enjoy them." That is not only wrong philosophy regarding the nature of a retirement system; it is a wrong philosophy regarding life. The great majority of employees will not entertain it when they reach the minimum retirement age. A minority will not only entertain it, but will retire at the earliest possible moment; and unless great care is exercised, the great body of honest, hard-working members of the system will discover that they have paid high premiums throughout life to provide these early retirees with a period of rest which is of no social utility and is enormously expensive. Early retirements are necessary in rare cases; the system should provide for them, but

The
Wrong
Philosophy
of Life

RETIREMENT OF PUBLIC EMPLOYEES

only after disability has been established through the most rigid examination the legislators find it feasible to devise.

THE CONDITIONS OF THE DISABILITY BENEFIT

Conditions
Which
a Law
Should
Contain

The section of the law providing for benefits in ordinary cases of disability, or of all disability if no distinction is to be made between ordinary disability and disability in the actual performance of duty, should probably establish the following conditions to a grant

1. That the employees should be disabled as the result of accident or disease.
2. That the disability be permanent.
3. That the disability be total; or if partial only, that it shall disqualify the employee for all service under the employing government.
4. That the facts shall be established
 - a. At the instigation of the employee's administrative superior acting along the usual line of authority on the ground that
 - I. Because of accident or disease the employee is unable to be present at his duties in compliance with the attendance requirements, or
 - II. Although able to attend, he is unable to perform the required duties while maintaining proper personal relations with his fellow employees, or
 - III. Although able to attend and perform his duties satisfactorily he is believed to be suffering from some disease which endangers the health of his fellow employees.
 - b. By an independent physician or board of physicians selected by the officers in charge of the retirement system.

CONCLUSIONS

5. That the grant of an allowance shall not be made in the first instance for more than a certain short period—probably not more than three years—and that at the end of that period all the facts shall again be reviewed by the physician or physicians and by the other officers in charge of the retirement system, and a new grant made, or the employee recalled to duty as the case may demand.
6. That all grants shall be subject to cancellation at any time if any material change takes place and that the employee may be recalled to duty, and if the employee is found engaged in an occupation which is inconsistent with disability or if a woman employee has married subsequent to the occurrence of the disability, it shall be canceled, and if fraud is established the employee shall forfeit the privilege reinstatement in the service.
7. That the independent physician or physicians appointed by the retirement board shall have the right to examine the person of the employee.
8. That all persons prior to appointment shall be examined by physicians selected by and representing the government, and none shall be admitted to the retirement system who are suffering from any disease or condition that will or is likely to disable them for the duties they are to perform.
9. That the insurance against disability shall operate from the date of appointment, provided the government's physician has made the examination and his report has been accepted as satisfactorily establishing the admissibility of the employee to the system. The insurance shall not operate prior to the completion of all the steps in the examination.
10. That if the disability disqualifies the employee for the duties of his position, but does not disqualify him for all service under the government, the administrators

RETIREMENT OF PUBLIC EMPLOYEES

of the retirement system shall have authority to have the employee appointed to the next vacancy occurring in a position which he is qualified to fill.

These conclusions regarding conditions are of course *prima facie*, but departures from them with a view to making retirement easier should be made with extreme caution and only for the purpose of meeting an imperative situation. Great care has to be exercised to prevent fraudulent retirements and to protect the honest employees from being taxed for the maintenance of the dishonest.

No Pro-
vision for
Temporary
Disability

Persons who are interested in having retirement systems developed to give complete protection to the employees will note that no provision is made under these conditions for temporary disability. The precedents apparently all favor caring for temporary disability through regulations governing sick leave. This course would seem to be the wiser one in the public service, because the responsibility for administration is left in the hands of the employee's immediate superiors who have a measure of control over the employee which could hardly be secured by a system of sickness insurance that would almost necessarily have to be more highly centralized. The sick leave regulations, however, must in many cases be revised to make them dovetail into the provisions of the retirement system and form one comprehensive system.

If special benefits are provided to cover cases of death or disability due to the actual performance of duty, machinery must be established to prevent employees suffering from ordinary disability securing benefits on the ground that their trouble arose in the actual performance of duty. If an independent medical board is established for ordinary disability retirements the decision in the first instance might well be left to it.

THE AMOUNT OF BENEFIT

Not to Be Discretionary. In respect to the amount of the benefit to be provided and the basis for determining it, one

can scarcely be dogmatic. The only general conclusion that can be stated with reasonable assurance is that the exact basis for determining the amount shall be established in the law and that it shall not be in any way left to the discretion of any administration officer or group of officers.

In Relation to Salary. Whether the amount of the superannuation benefit shall be related to salary—directly or indirectly—or whether it shall be entirely independent of salary, probably depends on the nature of the service for which the system is established. If the service is homogeneous and all enter at approximately the same age, at approximately the same salaries and become superannuated at approximately the same age after having had a fairly uniform history of salary or wage advancements, a uniform retirement allowance of a fixed amount—the so-called “flat pension”—is indicated. If the service receives employees of widely different ages, but pays all about the same rates of wages, the system of requiring a fixed contribution alike for all—either from the government, the employee, or the two combined—and basing the amount of the benefit on the purchasing power of the accumulation at the time of retirement is possibly applicable. Its defect is that it will not produce adequate benefits for late entrants, but this objection can probably be overcome in part by charging late entrants an extra premium to be deposited to their credit so that their accumulation or retirement may be larger and hence the annuity purchasable more nearly adequate. Neither of these systems is satisfactory, however, if the salaries paid different employees are very different. In that case the indications are that the benefits should be related to salary.

Question
of Relating
Benefits to
Salary
Depends
Upon the
Nature
of Service

“Flat
Pension”

The advisability of the consistent application of this principle of relating benefits directly or indirectly to salary is not, however, universally conceded. Several persons who have given the subject careful thought are opposed to applying the element of compulsion involved in a retirement system any

RETIREMENT OF PUBLIC EMPLOYEES

further than is necessary to provide a minimum of subsistence for the superannuated employees. They believe that the amount directly or indirectly withheld from an employee's immediate compensation to purchase retirement benefits should be reduced to the lowest possible minimum, and that in so far as possible, consistent with protecting the government from the losses due to disability and superannuation, the employee's compensation should be given him when earned to do with as he will. This philosophy results in using either the fixed contribution system, or the "flat pension" system even in a service having large salary variations; or if a relationship to a salary is adopted, in limiting the size of the salary to which the system applies, all salary above the limit being disregarded.

The persons who advance this argument regard compulsion as a necessary evil and they think it should be applied only in so far as it is absolutely necessary. Without entering into the controversy regarding the merits and defects of compulsion,¹ one may question whether a "flat pension," or a retirement allowance based on the accumulation from a fixed contribution, will in fact accomplish the necessary elimination of the superannuated, without giving rise to new difficulties. Obviously if the superannuation benefit is a mere minimum of subsistence, no highly paid official is going to retire until he is compelled to do so. His fellow upper-employees are not going to force him out to what they will regard as comparative penury, because a sort of "consciousness of kind" will develop. The etiquette of the service will be that all highly paid men remain. The answer may be made that the compulsory retirement age will take care of that; but what energetic, able employee who has reasonable prospects outside the public service is going to remain in it if he is to be dropped,

¹ It is interesting to note that the faculty of Harvard University in considering the proposals of the Carnegie Foundation for the Advancement of Teaching has favored the idea of compulsory savings for college teachers. See Harvard Alumni Bulletin, Nov. 7, 1916.

CONCLUSIONS

say, at sixty-five with a minimum of subsistence? He will naturally seek employment which has no compulsory retirement age, or which has a retirement system giving what appear to him as reasonable benefits. Instead of making the public service attractive to good men, the system would make it repulsive. For this reason the conclusion seems fair that in a service having a large range of salaries relationship between salary and retirement benefits is essential in respect at least to future entrants and that no upper limits are desirable.

If the service has a wide range of salaries, the founders of the system will therefore face the difficult question of whether the relationship between salaries and benefits shall be direct or indirect. If it is to be direct, the employee will, in all probability, be offered as a superannuation allowance a certain fraction of his salary for each year of his employment—say one-eightieth if the employee entering at twenty is to be permitted to retire at sixty on half pay. If it is to be indirect, the employee will have a superannuation benefit account in which will be deposited to his credit at stated intervals a certain fixed proportion of his salary earned since the last preceding deposit. The deposits will be allowed interest, and when the employee retires the whole accumulation to his credit will be taken to purchase an annuity, which is to be his superannuation benefit. Since the deposits were proportioned to his salary, the amount of the benefit will depend in part on the amount of his salary and in part on how long his deposit has been accumulating interest.

Almost all precedents and the preponderance of the evidence of the English actuaries are unquestionably in favor of the system establishing a direct relationship between salary and the amount of superannuation benefit; yet the writer is not only unable to record a conclusion in favor of direct relationship, he is of the opinion that it is undesirable and that the ultimate solution of the superannuation retirement problem lies in the perfection of savings and annuity systems which

Direct and
Indirect
Relationship
to Salary

Direct
Relationship
to Salary
Undesirable

RETIREMENT OF PUBLIC EMPLOYEES

base the amount of the contributions to be saved and invested at compound interest on the salary the employee earns and the amount of the superannuation benefit on the accumulation to the employee's credit. Under such a system no definite proportion of any salary should be absolutely promised as a benefit; the benefit should rest solely on the purchasing power of the aggregate accumulation available on retirement.

Precedents of Direct Relationship

That most systems should have used the direct relationship is entirely natural, because the immediate aim of their founders has been to eliminate the superannuated; and they have generally appreciated that relationship between benefit and salary is necessary to accomplish that end. The more obvious procedure is to make the benefit a certain proportion of salary, and since many of the older systems were established by laymen without professional advice, the benefit directly related to salary became the typical one.

When the actuaries have been consulted, they have apparently conceived the problem mainly from the point of view of the business administrator who desires a system which, for the least expense, will accomplish the elimination of the disabled and the superannuated. Expenses can be reduced to a minimum by a high degree of collectivism, gathering all assets into a common fund, not ear-marked for any individual, and distributing them according to the immediate needs of the service. Such a system means minimum assessments for superannuation and disability protection because it involves forfeitures in the event of the happening of the other contingencies, and gives benefits according to those needs without consideration of the relation between cost of the benefits given and the contributions by or in behalf of the particular employee to whom they are given. The actuaries have apparently rather looked with disfavor on benefits in the event of other contingencies, because such benefits increase cost. They have not perhaps as a class given sufficient weight to the fact that natural forces in the lives of the employees inevitably lead them to prefer somewhat higher premiums or somewhat lower

superannuation and disability benefits if insured against forfeitures; and although such an authority as Mr. Henry W. Manly has recognized that the cost of the retirement system is probably borne by the employees, the actuaries have apparently not generally analyzed the systems along that line. They have dealt too largely with private funds in which compulsory retirement ages were not established so that inequities of one kind were perhaps offset by inequities of another. When benefits in event of death, resignation and dismissal are recognized, not as excrescencies to be conceded begrudgingly, but as integral parts of the system, to be provided for at the outset, when disability is covered as a separate contingency on the insurance basis, and fairly uniform compulsory retirement ages are established, the objections to the savings and annuity system for protection against old age seem to be of comparatively little weight.

Against the direct relationship device, on the other hand, grave objections have to be advanced, since its use, in a system scientifically administered on an actuarial reserve basis, necessitates the application of the salary scale in such a way that it becomes a vital part of the foundation of the entire structure. Against such a use of the salary scale four objections are raised: (1) it introduces an element of financial instability into the fund, (2) it interferes with administrative changes, (3) it is inequitable as between employees of different classes and as between different employees of the same class, and (4) is not readily adaptable. These objections have been considered at length in the chapter on superannuation benefit (page 128) and no attempt will be made to repeat the detailed discussion there given, but a brief review of the more essential features will perhaps be worth while to make clear the general nature of the objections and the reasons for preferring the indirect relationship device.

Objections
to Direct
Relationship

The salary scale is an actuarial computation used to forecast the rate of change which will take place in the salaries of the employees in the future as they serve from entrance

RETIREMENT OF PUBLIC EMPLOYEES

to final retirement. Its use is necessary to determine on what salaries the retirement benefit to be paid in the future will be based and if contributions are provided, as percentage of salaries, on what salaries these contributions will be based. It rests primarily on data regarding the salaries of present employees or of employees of the immediate past, and it involves the use of averages. It makes two assumptions, (1) that the rate of salary change as reflected by the data for the present employees or those of the immediate past is a reasonably correct index of the rate of change to take place in the future and (2) that averages are suitable for use in matters involving the equities of employees.

Since the salaries and wages existing in a service at any time are the resultants of complicated forces which are in unstable equilibrium, the assumption that the present is a suitable index for the future is subject to attack. Changes in economic conditions, successful movements for salary adjustments, reorganizations, introductions of new methods, and the development of new branches of the service, may occasion deficits in the actuarial reserves, which will cause trouble.

Interferes
with Admin-
istrative
Changes

That a reform, otherwise desirable, would occasion a heavy deficit in the retirement fund, might become the conclusive argument for preserving an unsatisfactory existing situation. American administrative officers, in increasing numbers, are recognizing the importance of overhauling the salary provisions in the public service to make them less rigid, more responsive to the changes in economic conditions, and better arranged to offer incentives to the type of men the public requires for its work. These reforms would undoubtedly be hampered if the change meant that the reserve fund accumulated to pay retirement benefits would have to be supplemented by large additional appropriations.

Inequitable
as Between
Employees

Equity cannot be done employees on the average. Under a retirement system supported wholly by contributions from the employees, those who advanced at a rate above the average would receive in benefits more than they had paid for; the

fund could give it to them only because the employees who advanced at a lower rate than the average would get less than they paid for. A gambling element would thus be introduced. Each pay-day the employee would know his immediate wage only; he would not know what the value of his retirement rights in respect to the service rendered might be, because their real value would depend on what his final salary might be or what his average salary would be over a term of years. Two men might be working side by side, each doing equally good work for equal immediate wage, but one might really be getting considerably more than the other because the more poorly paid might later in life be the one who was not given the vacancy above when it occurred. If benefits are based on the salary earned at retirement, the greatest prize, in proportion to contributions, goes to him who in the last years of his service springs from a minor position to an important one. The obvious danger from such a provision can be overcome by basing the benefits on average salary throughout service, but even then the element of unfairness would not be entirely eliminated. The fair arrangement seems to be to say to each employee each pay-day, "You have been paid for your services this sum of which so much is given you in cash, so much deposited to your account in the superannuation system, and so much utilized to pay the premiums on your disability insurance and on your life insurance," if a special life insurance benefit is provided. The employee gets the advantage of collectivism in the annuities, where collectivism is equitable, and he is preserved from compulsory collectivism in determining the amount of the annuity where collectivism operates to the advantages of those exceeding the average in rate of advancement and to the disadvantage of those falling below.

The direct relationship device complicates the matter of withdrawal benefits and of benefits in event of death if no special life insurance provision is made. The indirect or savings and annuity system is simplicity itself because the em-

Not
Readily
Adaptable

ployee's contributions are deposited to his account and are merely paid over on those contingencies or applied as the law may direct.

Relationship
to Length
of Service

A relationship between the amount of the superannuation benefit and the length of the employee's service is desirable. In systems basing benefits directly on salary this relationship is provided by an arbitrary scale. Generally this scale again involves collectivism; those who retire early get more for their contributions proportionately than do those who retire later. The indirect system includes no such element of collectivism in its superannuation provision. So far as superannuation provisions are concerned each employee gets what the deposits to his credit with the interest will buy. Very early retirees because of accident and disease, under an adequate system of this type, would be cared for by disability insurance and their accumulation toward superannuation; later retirees leaving after the superannuation age would get what they themselves had directly or indirectly provided. The anxious-to-retire-at-once employees would not be insured a larger benefit than they had paid for at the expense of the anxious-to-stay-in-harness. Genuine cases of disability occurring soon after the superannuation age would have provision under a proper system as great as they would have had if disabled before, but not as great as if they had remained to the compulsory age of retirement. The rising accumulation of compound interest and the fall in the cost of annuities would offer strong inducements to remain, so strong in fact that the compulsory age would probably become the regulation age except in cases in which the employee met with some accident or disease necessitating retirement or in which he was asked to go because of failure in abilities.

Indirect
Relationship
to Salary

Under a simple system having indirect relationship to salary the deposits made to the account of each employee are a fixed percentage of salary alike for all regardless of their age at entrance. Unless all enter at approximately the same age such a device is more or less defective, because if adjusted to

give suitable benefits to the early entrants, it gives very small benefits to the late entrants. This difficulty can readily be overcome by fixing the percentage of salary to be contributed in respect to an employee according to his age at entrance. Young entrants will require only a low percentage, late entrants a high one. If the state is to make contributions it would seem as if it should give a like percentage of salary or a like amount of money for each employee regardless of age at entrance and that the variation caused by differences in age at entrance should be treated as personal and should be met by the employee. A maximum limit should of course be placed on the percentage of salary that is to be deposited for superannuation benefits, because otherwise in the case of persons entering at late ages the percentage deductions would become prohibitive if the attempt were made to provide for them anything like the same benefit that was desired for employees who had given their whole life to the service.

The correct procedure would appear to be to decide first approximately what proportion of, say, the average salary of the last few years of service it seemed desirable to provide as a superannuation benefit at the compulsory age of retirement, and then to have the actuary determine what proportion of salary would have to be set aside each year to provide for an annuity of that amount in respect to entrants at each age. If the entrance ages differ materially, the percentage would be comparatively low for the earliest years, and prohibitively high for the latest. Decision could then be made as to what is a reasonable maximum percentage of salary to be paid as a contribution; and for all entrance ages at which the percentage necessary to provide the desired benefit exceeded the maximum thus established the contribution rate would be reduced to the maximum and the benefit correspondently decreased. In this way all who enter the service early enough in life to be able to afford the benefit selected as ideal would get that benefit, whereas those who entered too late to afford it would get as large a benefit as they could afford. A serious

Approximate Proportion of Salary Should Be Decided First

RETIREMENT OF PUBLIC EMPLOYEES

question would arise as to whether persons ought to be admitted to the service after a certain age.

The Salary
Scale Should
Be an In-
strument of
Measure,
Not the
Foundation
of the
Structure

The actuary in making his calculations to determine the percentage contributions necessary to give the desired proportions of the average salary of the last few years of service would have to use the salary scale, but it would not become part of the foundation of the structure, it would be merely an instrument of measure used in designing it. Any defects would not affect the financial stability of the structure, or make it an obstacle to administrative reform, or give rise to inequities; they would merely make the benefit a little larger or a little smaller than the founders considered ideal. Perhaps a word or two of explanation regarding this assertion is worth while.

The superannuation benefits promised under this system would not invariably be the proportion of salary that is regarded as ideal. The percentages of salary to be deposited would be worked out so that, in the absence of serious economic or administrative changes, they would produce the desired benefit only in the average case, but no one would have been promised that exact benefit; they would have been promised what the accumulation to their account thus produced would purchase. The system would be constantly readjusting itself to changes, because the changes would affect the contributions which would in time affect the amount of benefit. A retirement system cannot be built rigidly, it must allow for some expansion and contraction arising from those changes in the economic temperature that take place from time to time. If the amount of benefit is firmly fastened to salary, the expansion and contraction affect the financial stability of the system and endanger its strength. If the exact proportion of benefit to salary is left free to move slightly, the desired proportion can be secured within reasonable limits and the structure can be given greater financial stability. This play, moreover, will allow for administrative changes without injustice, because the employees who profit from the changes can

CONCLUSIONS

hardly demand fairly that their retirement benefits shall be increased in respect to services rendered before the changes take place.

Under this system, moreover, the contributions are not put into a common pot to be gambled for, those failing to advance in salary at the average rate paying part of the cost of retirement allowances for their more fortunate brothers who do. The fortunate employee who advances more rapidly than the average gets precisely what his contributions and those made in his behalf will buy, and since it was assumed he would advance only at the averages rate, his superannuation benefit in proportion to his salary is smaller than that of his less successful fellow entrant. The employee who has worked along in a routine position without much advancement on the other hand finds that he has the largest benefit in proportion to his final salary of any of the retirers, because his account has been receiving contributions figured on the basis that he would get average promotions, whereas in fact he has not. Socially this device is desirable, for in a quiet way with perfect equity to the employees it gives some recognition to the well-established fact that the lower an employee's salary the higher the percentage of it required to provide the absolute necessities of life.

If the service to be covered has low-paid employees, some device has to be adopted to give recognition to their needs, as even if half active salary is established as the desired benefit in the case of the more highly paid men it will not take care of those whose wages are at or near the minimum of subsistence. To meet this requirement it would appear feasible to regard the ideal superannuation benefit as composed of two parts: (1) a certain fixed sum and (2) a certain portion of salary, the two together making the total allowance. For example, in a community where the minimum of subsistence for an aged employee and his wife was found to be approximately \$600 a year and the wages of the lowest paid employees of the retirement age were \$720, the actuary might be asked to

Contributions Are Not Gambled for

Ideal Benefit Composed of Two Parts

RETIREMENT OF PUBLIC EMPLOYEES

determine what percentage of salary would have to be set aside to provide in the average case an annuity at the retirement age² of \$400 plus one-third average salary of the last, say, five years for the different ages at entrance. The deposits to the account of the employee would then be made on that basis. The employee in the \$720 class would on retirement have provided himself with an annuity of \$640 had he had normal advancement, whereas the employee in the \$900 class would have \$700, the employee in the \$1,200 class \$800; the employee in the \$1,800 class, \$1,000; and the employee in the \$2,400 class, \$1,200. Each, however, will have exactly what his contributions and those in his behalf will pay for, and these results would be produced only in the average case. Those who advance less rapidly will get larger benefits in proportion to their salaries, those who advanced more rapidly smaller benefits.

Where Is
Such a
System in
Operation

"Where," it may be asked, "is such a system in operation?" and the answer must be very frankly "nowhere." The device described appears to be a possible development along the line laid down in the English Elementary School Teachers' Deferred Annuity Fund, the Massachusetts System, Mr. Herbert D. Brown's plan for a Savings and Annuity System for Federal Employees, and the Carnegie Foundation Plan for a Savings and Annuity System for College Teachers. In the English system the contributions are a fixed sum, in the Massachusetts system a fixed percentage alike to all, and in Mr. Brown's scheme a percentage varying with age at entrance and increasing with salary advancements. This scheme suggests the use of the salary scale to make the percentage deductions uniform throughout service, thereby avoiding high retents from late promotions and the combination of the fixed sum and the proportion of salary in arriving at the percentage

² It would probably prove advisable so to calculate the percentages that would have to be deposited, that the \$400 would become available at the minimum permissive retirement age, whereas the full amount of the salary addition would only be available at the compulsory age.

CONCLUSIONS

deduction to provide suitable minimum allowances, and as will be subsequently explained to facilitate correlation with a disability benefit. It has seemed to the writer that along this line lies the solution of the superannuation retirement problem rather than along the line of benefits directly proportional to salary. The important point is to connect benefits and the amount available to pay for them, rather than to connect salary and benefits and to run the risk of endangering the financial stability of the system, of interfering with changes, and of dealing unfairly by the less highly paid classes.

The Amount of Superannuation Benefits in Relation to Economic Need. The exact amount of the superannuation benefit which ought to be provided constitutes a question regarding which few specific conclusions can be drawn. For the employee who has spent his life in the service the general rule would seem to be that the benefit should be not less than the minimum of subsistence for an employee of the compulsory superannuation age and his dependents at that age, nor should it exceed a sum which will purchase the necessities of the employee's standard of life at that age. In highly athletic services, however, where the assumption is that the employee will take up some other business on retirement it may be questioned whether full minimum of subsistence should be paid. If the employee has been incapacitated for further work by the service the retirement allowance should of course sustain him, but if he is still capable of working it is questionable whether the allowance under a compulsory system should be made high enough to permit the employee to live in idleness.

In the compromise regarding amount of superannuation benefit which must be reached between the government, the employees, and the public, the fact must always be kept clearly in mind that the retirement allowances are part of compensation. What the public pays for the services in a department having a retirement system is immediate wage plus the cost of the retirement allowance. The concern of all parties is

Not Less
Than the
Minimum
of Sub-
sistence

Retirement
Benefit and
Immediate
Wage Must
Be Cor-
related

RETIREMENT OF PUBLIC EMPLOYEES

to have these two items of compensation properly correlated, and care must be continually exercised lest a system be established which directly or indirectly takes too large a proportion of a man's earnings in his active years to provide a larger benefit than he will need in his old age, when his family responsibilities are greatly diminished. This result can easily be produced if the legislators and administrative officers will consent to a consideration of the retirement problem as something entirely apart from the compensation problem. When the retirement system alone is being considered the natural object of the employee is to work for maximum benefits, especially if the system is non-contributory. If a vote of the employees were taken, however, as to their choice for a smaller benefit and more immediate wage or a larger benefit and a less immediate wage, they would probably prefer the larger immediate wage by heavy majorities.

Equal Protection for Equal Payments

The Amount of the Disability Benefit. The amount of the disability benefit presents many problems that are distinct from those involved by the superannuation benefit, and yet the two are in many respects alike. The objections to a disability benefit directly dependent on salary are essentially the same as those to a superannuation benefit thus determined. On the other hand, the method of basing the disability benefit solely on the purchasing power of accumulations to an individual's account is entirely impracticable. Disability benefits must be provided on a collective or an insurance basis, those escaping disability paying for the benefits of those who do not. To give absolute equality of return to each employee is therefore out of the question, but it is possible to give each employee equal protection for equal payments. This result can be accomplished by the device of having each employee insured against disability for a certain sum, varying the premium according to the cost of that insurance at the employee's age at entrance, or by the device of having each employee pay a certain amount for disability insurance and determining the

CONCLUSIONS

amount of the insurance by the purchasing power of this premium. The employees may, if it is so desired, be divided into classes according to entrance salaries, or according to service classes, or according to any other definite index available at the time of entrance into the service, and the amount of insurance to be carried or the amount of premium to be paid can be varied for each of these classes. It might prove feasible on promotion to require an employee to take out additional disability insurance at the premium for his age at promotion. The point is to have him insured for a definite amount at a definite premium, and not to have the premium fixed and have the amount depend on his salary advancement.

If the superannuation benefit is provided on the savings and annuity basis and consists, in the average case, of a fixed sum plus a selected proportion of salary (\$400 plus one-third salary was used for illustrative purposes on page 414), the disability benefit could apparently well be made \$400 plus such an annuity as the accumulation standing to the employee's credit toward a superannuation benefit would purchase. A provision would probably have to be included, however, that in no case should the amount of the disability allowance granted exceed the amount of the superannuation allowance which would have been available had the employee remained in the service at the salary he was drawing at the time of disability, until the minimum superannuation age. Such a provision would probably be applicable to any individual employee only for a few years immediately preceding the minimum superannuation age. Then the accumulation toward a superannuation benefit would be a substantial sum, and since the cost of annuities is less for disabled lives than for superannuated lives, it would generally happen, if such a provision were not included in the law, that an employee could get more by retiring as disabled at fifty-nine than he could by remaining until sixty and retiring as superannuated. In some services it might even happen that in the absence of such a provision a disabled employee as young as fifty-five could draw

Composed
of Two
Parts

RETIREMENT OF PUBLIC EMPLOYEES

a larger annuity than if he had remained in the service until sixty and had then retired. Such an arrangement is unsafe because it offers too great a temptation to prove disability in those years in which the disability benefits subsequent superannuation benefits, and consequently the provision indicated seems necessary as a safeguard.³

Under such a disability provision any employee on disability

³ Exactly how this provision shall be worked out by the actuary in fixing the premium rates to be charged is a perplexing question. The difficulty arises from the fact that not all the employees will be equally affected. If the provision were ignored in fixing contribution rates and the amount of benefits arbitrarily reduced, the lowest paid employees generally speaking would suffer the smallest proportional deductions and the highest paid the largest. One device suggested has been to diminish the amount of the fixed sum insurance in the last few years, but this procedure is open to objection because it will not provide satisfactorily for the less highly paid employees who will have comparatively small accumulations and who depend almost entirely on the fixed sum provision to carry them up to the minimum of subsistence. Another possible device would appear to be to calculate what the savings through such a provision would be in the average case, and to reduce the premium for disability insurance on the assumption of these profits. A third device is non-actuarial. It would involve calculating the premium rates on the basis that no deductions would be made. When an employee was retired as disabled the actuaries would figure what his benefits would have been had no such provision been in force, and then what they would have been had he remained until the minimum superannuation age with no change in salary. If the superannuation allowance is smaller, such part of his accumulation as is necessary to purchase an annuity of that sum shall be so applied and the balance carried to a special surplus account. Annually the funds in this surplus account would be utilized to purchase additional annuities for all disabled employees who are in receipt of annuities of less than a certain fixed amount, being distributed among them on a per capita basis, with the provision that when an employee's annuity has been brought to the fixed amount, he shall not share further in the distribution. In case all annuities had been brought to this amount, the surplus would be applied to raise the level of the minimum annuities paid. The recipients of the smallest annuities will in general be those disabled in comparatively early life before their accumulations toward superannuation retirement have become sufficient to purchase any considerable increment to the fixed sum disability insurance. Another possible device is to make the fixed insurance against disability somewhat lower than the fixed portion of the superannuation retirement allowance, providing, say \$360 as the amount of the disability insurance and \$420 as the fixed portion of the superannuation allowance.

CONCLUSIONS

would be assured of a minimum annuity of the fixed amount, which should be approximately the minimum of subsistence for the employee as an individual. For many years the annuity would be substantially the whole allowance, because the increments purchasable by the superannuation accumulation would be small. As the later years of middle life were approached, the amount available as a benefit would increase at a constantly accelerating rate until some few years before the minimum superannuation age it would reach the level of the minimum superannuation benefit and remain there. Persons genuinely disabled would have no particular incentive to remain in the active service, for it would be some few years before they could retire with any greater benefit. Persons anxious for leisure might be tempted to leave if they could, but they would face the rigid medical examination and the periodical grants of the disability benefit, whereas if they waited for a few years they would have no examination, no periodical grant, and a chance for an increased benefit. Although such a system may present some actuarial difficulties in calculating premiums, it appears on its surface to have many social and administrative advantages, and at the same time to be financially sound and substantially equitable as between different classes of employees, since it gives for the superannuation benefit equality of return and for the special or fixed sum disability benefit equal protection for equal premium.

Minimum
Annuity
Equal
to Min-
imum of
Subsistence

The Amount of the Withdrawal Benefit. The reasons for the conclusion that a benefit in event of withdrawal from the service is desirable and that no distinction should be made between resignation and dismissal have already been set forth in this chapter (on page 391). The conclusion that benefits are part of compensation for service, carried to a logical extreme, leads to the further conclusion that the employee has an equity not only in the contributions which he himself makes to the retirement system, but also in those which the govern-

Employee
Has an
Equity in
Government
Contribu-
tions

RETIREMENT OF PUBLIC EMPLOYEES

ment makes in his behalf. They are all earned by the service, and consequently it would seem to follow that on withdrawal the employee should be entitled to the whole amount except in so far as any part of it has been expended in furnishing him with protection which he has already enjoyed. Since disability benefits are necessarily provided on the insurance basis—those who escape disability contributing for those who do not—it is absolutely unfair that a retiring employee should demand any return of that part of his contributions which have already been expended in providing a disabled employee with such a benefit as he himself would be receiving had he been the unfortunate one. Payments toward a special benefit in the nature of a life insurance policy are in the same class. So far as the employee has already received protection and enjoyed it, he should pay for it, but in so far as he has been forced to accumulate part of his compensation to provide a reserve for protection which he is to receive in the future he seems to have an equity that should lead to the return of the whole amount thus accumulated whether it has been contributed by the government or by the employee.

Binding
the Em-
ployee a Bad
Practice

The argument is sometimes advanced that the government contributions, although part of compensation, is a special payment for long services promised upon condition that the employee will remain with the government until the retirement age unless death or disability intervenes. A life contract between a private employer and an employee would not be sustained in the courts, as it is recognized as against public policy that a man shall bind himself to serve a single employer for more than a reasonable time. The same public policy would seem to make objectionable a contract any part of the consideration for which was conditional upon life service to the retirement age. Retirement systems cannot at the same time be adequate social insurance systems acceptable to an enlightened public and devices for binding an employee to the government upon penalty of a forfeiture of any part of the employee's accumulated provision against old age or against fu-

CONCLUSIONS

ture disability or against death. The public has generally sought to preserve freedom of contract and the mobility of labor. It seems, therefore, that, although most retirement systems at the present time provide for a forfeiture of the whole or a part of the contributions of the government in event of resignation or dismissal, the practice is bad from the point of view of the public and that where the interests of a single employing government and of the public at large conflict the interests of the public should prevail. The benefit on withdrawal, it would seem therefore, should be the accumulation toward the superannuation benefit and the reserve accumulated in respect to disability insurance or any special life insurance benefit.

The argument that withdrawal benefits encourage resignations is not unfrequently advanced; it is said that certain employees will leave the service simply to secure immediate possession of their funds. If this fear appears reasonably well-founded, after careful consideration of the type of the employees involved, the difficulty can be met by requiring that the accumulations to the credit of an employee cannot be withdrawn on resignation or dismissal, but must remain in the fund until the employee reaches the minimum superannuation age, when they will be utilized for the purchase of an annuity, or until his death if the employee dies before the minimum superannuation age when they will be paid to his personal representative.

Deferred
Benefit

The Amount of the Benefit: Death in the Active Service.
In event of death in the active service from causes not directly due to the actual performance of duty, the minimum benefits should be the accumulations to the account of the deceased employee, with the compound interest, whether these accumulations have resulted from the employee's own contributions or from contributions made by the government in his behalf. Any smaller benefits will make it appear that the system derives a profit from the death of a member and will result in

RETIREMENT OF PUBLIC EMPLOYEES

friction. The benefit in event of death is, moreover, of great importance to society since the great majority of employees dying before the minimum superannuation age leave dependents who must be supported.

Objections
to a
Widows'
and
Orphans'
Fund

The weight of the evidence is, however, overwhelming against the establishment of a widows' and orphans' fund, because the benefits are part of compensations and must be distributed among the employees according to the value of their services and not according to the number and character of their dependents. The value of a widows' and orphans' fund is very different to different employees, and very different to the same employee at different periods of his life. No device for distributing or assessing the costs with even an approximation to equity has been suggested, and accordingly the conclusion seems fully justified that benefits in event of death in the active service should be payable to the personal representative of the employee to be distributed by him as the employee may direct, or as the law may direct.

Life
Insurance
Benefit

Many persons advocate the inclusion of a special life insurance benefit in the system, either to take the place of the mere return of contributions or to be over and above the mere return of contributions. The differences in the family responsibilities of different men and of the same man at different periods of his life are, however, so great that it seems inadvisable to extend thus far the feature of compulsion. The inclusion of optional life insurance benefits purchasable by the employees at cost seems a highly desirable feature of a retirement system, because (1) it would encourage the carrying of adequate life insurance, (2) it would enable the employees to insure cheaply, and (3) it would add to the stability of the fund. A system that sells only annuities runs risks from social changes that tend to prolong life. If that system adds a life insurance feature it can face such changes more securely for losses in the annuity department through increased longevity will be offset in part by gains through decreased mortality in the life insurance department. Optional

CONCLUSIONS

life insurance benefits, if offered, should probably lay special stress on term insurance policies in comparatively small units. By offering term policies for various terms in small units, the system should enable the employees so to supplement their regular allowances that they and their families will be reasonably protected against all the more important contingencies of life. The important point in dealing with death benefits of all kinds is to preserve flexibility.

Amount of Benefits: Death After Retirement. Flexibility in the case of death after retirement on a superannuation benefit can probably be best secured by the device of offering optional modes of settlement for choice at the time of retirement as follows:

1. For the man without dependents or for the man where dependents are adequately provided for, an annuity for his life with no payments in event of his death.

2. For the man with his wife only to consider, a last survivor annuity payable to him or to his wife so long as either of them shall live.

3. For the man who has one or more children still dependent, an annuity payable to him as long as he shall live, with the provision that if he shall die before his youngest child is eighteen, payment shall be continued to his family until the youngest child is eighteen. Eighteen is of course used here only for the purpose of illustration. Other ages could be used.

In each case the amount of the annuity would depend on the amount available to the employee's credit on retirement. This sum he could apply as he chose, buying with it so much annuity as it would purchase under any one of the three classes.

Amount of Benefit: Death or Disability in Actual Performance of Duty. The general conclusions reached regarding ordinary disability, death in the active service from ordinary causes, and death after ordinary superannuation or disability

Cost
Should
Be Borne
by the
Government

RETIREMENT OF PUBLIC EMPLOYEES

retirements are not as a rule applicable to cases in which the death or disability is due directly to the actual performance of duty. In the case of service accidents and diseases, the government is directly responsible for all costs. Although economic forces may tend to shift part of the cost benefits to the employees, it is highly desirable that in the first instance the whole cost shall be borne by the government and in so far as possible shifted to the consumers of the service. The benefits in event of these contingencies are not to be thought of as parts of the regular wages or salaries of each employee but as being in the nature of compensation for injury done or as liquidated damages. The question of the equitable distribution of the assets of a fund arising from direct or indirect contributions from active salaries or wages does not therefore demand consideration in dealing with this problem.

Not a
Serious
Financial
Problem

In the ordinary service, moreover, service accidents and diseases ought not to be, and probably are not, sufficiently numerous to constitute a serious financial problem. Even if a reserve has been established for meeting liabilities from this source, the state should not be seriously inconvenienced by economic and administrative changes which might tend to bring the actual liabilities above the estimated liabilities.

In Relation
to Salary

For these reasons it would seem that a benefit directly proportioned to salary is not objectionable as a device for providing for death or disability directly resulting from the actual performance of duty. In the case of death due to the actual performance of duty much may be said in favor of the widows' and orphans' fund, as the widows and orphans are the ones damaged and entitled to compensation.

Classes of
Dependents

Whether the benefit is based on salary or on the number and type of dependents, provision must be made in the law for defining the classes of dependents who will be recognized as entitled to benefits in event of the death of the employee.

Partial
Disability

In case of disability due to the actual performance of duty the law should also make provision for partial disability even if the injured employee is given other employment under the

CONCLUSIONS

government. A clause should, however, be included in the law that the sum of the salary earned by the disabled employee and the amount of his special service disability allowance shall not exceed his earnings in the position from which he was retired as disabled.

Correlating the special benefits in event of service accidents and diseases with the other benefits provided by the system is a problem that deserves brief mention in this chapter. In the event of death or disability resulting from the actual performance of duty, shall the employee receive the benefits which would have been paid had the contingency happened from ordinary causes and in addition the special service-accident or disease benefit, or shall he receive only the special service accident or disease benefit? In so far as the benefits are organized on the collective or insurance basis—those escaping a contingency providing for those who do not—the conclusion seems reasonably clear that the special service benefit only should be paid. This benefit should provide reasonable protection; and the employee should not be compelled, directly or indirectly, to insure against a contingency against which he is already protected. Since the social and economic needs of the employee and his family are essentially the same on the happening of a given contingency, whether it happens from one cause or another, the object should be to give reasonable protection against the contingency, however it happens, rather than to give exceptionally high benefits if it happens in a particular way. The reasoning would extend to the correlation of the benefit in event of death in the performance of duty with a compulsory insurance against death from ordinary causes and possibly even to correlation with optional insurance against death from ordinary cause.

Correlating
with Other
Benefits

If the system permits the employees to take out life insurance with it in optional amounts, it might be well, if service accidents and diseases are numerous, to offer two types of policies, the cheaper payable only in event of death from ordinary causes, the more expensive payable regardless of cause.

Options

RETIREMENT OF PUBLIC EMPLOYEES

The wise employee, appreciating that the system already gave his dependents reasonable protection in event of death in the actual performance of duty, would spend what he could spare for life insurance for the cheaper policy as he could thereby purchase more protection of the kind that the system did not give him.

Individual
Savings
Shall Be
Paid in
Addition
to Special
Benefits

If the superannuation benefit has been provided on the individualistic savings and annuity basis, in which no element of collectivism enters until the employee's accumulation has been invested in an annuity, the question of correlation becomes, Shall an element of collectivism be introduced, by paying only the special benefits in event of a service accident or disease and distributing the employee's accumulation in respect to superannuation among the other employees upon some equitable basis? The amount of the probable accruals from this source would of course be estimated in advance, and the rates of contributions fixed in anticipation of them. Such a device would undoubtedly be highly unpopular because under the savings and annuity system the employees regard their accumulations as being absolutely their own property and they would regard the proceeding as arbitrary. The amount taken from different employees would of course be different in different cases and that fact would give rise to friction. The accumulation on account of superannuation, in a savings and annuity system, should apparently therefore remain personal and individual and be paid in addition to any special service accident or disease benefits.

THE COST OF A RETIREMENT SYSTEM

Affected by
Contingencies
Covered

The aggregate cost of a retirement system is, of course, profoundly affected by the decision regarding the contingencies to be recognized as warranting benefits. A system offering superannuation benefits only and requiring forfeitures in event of death, resignation, or dismissal, is, other things being equal, vastly cheaper than a system which recognizes the rights of the employees under all contingencies. In these conclusions,

CONCLUSIONS

the old legal maxim, "Equity abhors a forfeiture" has been accepted as applicable to retirement systems; and it has been recommended that on no contingency shall an employee lose anything. The system recommended is naturally therefore expensive, and is preferred on the ground that modest provision against all contingencies is better than large provision against certain contingencies and no protection against others.

Since the selection of contingencies to be provided for is expensive, the founders of the system must economize in other directions to avoid heavy direct or indirect retents from the employee's immediate compensation. Three major lines should be followed in economizing.

Three
Lines in
Econ-
omizing

1. Every reasonable precaution should be exercised to prevent unnecessary or fraudulent disability retirement.

2. The superannuation retirement ages should be placed as high as can be done without jeopardizing the success of the system; and no person should be permitted to retire without proving disability due to accident or disease before he has reached an age at which superannuation may be reasonably presumed.

3. Modest benefits only should be provided.

Once again emphasis must be placed on the fact that retirement systems are not devices to provide leisure for able-bodied employees still capable of performing their duties; they are insurance devices to take care of employees who through accident, disease or advancing age are unable to continue in active service. The cost of this insurance is borne directly or indirectly by the employees. In the case of disability, those who escape pay for those who do not; in the case of superannuation, the employee gives up some of his earnings in early life to have them available later. In each case the reasons against excessive benefits are strong. The able-bodied and effective should not be taxed to provide more than modest provisions for the disabled; the young or the middle-aged man should not be required when his family responsibilities are at their maximum to put aside any more than is necessary to protect

Objections
to Excessive
Benefits

RETIREMENT OF PUBLIC EMPLOYEES

his old age; and it must be remembered that an old "man wants but little here below nor wants that little long."

Differences
in Cost
With
Regard to
Age, Sex,
Occupation

Distribution of Cost Among Individuals. To deal equitably between different classes of employees and between different employees of the same class, the fact must be recognized that the cost of benefits, per dollar of the amount allowed, generally varies greatly as between different employees and classes of employees. If a uniform compulsory superannuation age is established, the cost, per dollar of superannuation benefit, is greater for the late entrant than for the early entrant. The cost of such a benefit is generally greater for women than for men, and not infrequently it is greater for the employees in one line of work than for those in another. In a system of so-called "free pensions"—in which all the costs of the benefits are borne in the first instance by the government—failure to recognize the differences in cost by offsetting variations in the amount of benefits granted is an inequitable practice, since it produces inequalities in the aggregate ultimate compensation paid different employees for the same services. To repeat an illustration formerly used, if two employees are working side by side, each doing the same work equally well, at the same immediate wage, with the same prospect of superannuation retirement at the fixed age, the government pays in the aggregate less to the man who has served it the longer, because the retirement allowance which it will give to him costs it less per hour of service rendered than does the allowance it will pay the later entrant. If one employee is a woman and the other a man it is probably paying the woman more than the man even if both entered at the same age and are receiving the same salary, because an annuity for a woman at the compulsory retirement age will cost more than an annuity for a man at that age. Even under a non-contributory system, supported wholly by the government, considerations of equity would seem to demand that variations in cost due to age at entrance, sex, or occu-

CONCLUSIONS

pation should be offset by variations in the amount of benefit.

Under a system in which the costs are assessed in the first instance wholly or partially against the employees, the case for establishing a definite relationship between amount of benefit and cost of benefit is perhaps more apparent, but it hardly seems as if it were any stronger. If the benefits under a non-contributory system are in fact deferred pay, as most students of retirement legislation now agree, the equities between the employees are precisely the same whether the system be entirely non-contributory or wholly contributory. The employees in the last analysis pay for the benefits under either system. Under the non-contributory system the only device for doing justice is that of reducing benefits in proportion to cost. Under a wholly or partially contributory system one can combine two devices, increasing payments made by the employee in proportion to the cost in his particular case and reducing benefits so that he may afford to pay the cost.

Increasing
Contribu-
tions or
Reducing
Benefits

The Division of Costs Between Government and Employees. The way is perhaps now cleared for a statement of the conclusions which seem to be the sound ones on that mooted question, "Shall all the costs be borne in the first instance by the government, or shall the whole or a part of them be assessed against the employees?" The conclusion has already been explained that the decision of this point does not determine the ultimate incidence of the cost in respect to future entrants, because that incidence is determined by forces lying beyond the control of the founders of the system. Nor does the decision on this point determine what benefits shall be granted, for the desired benefits can be granted under any system. The only peculiar merit of the non-contributory system is that it involves no cost of collecting contributions, and hence it would be cheaper to administer. The value of this advantage can, however, be greatly overemphasized, for if a non-contributory system is scientifically administered and is devised with due consideration of the equities of the em-

Non-con-
tributory
System

RETIREMENT OF PUBLIC EMPLOYEES

ployees it will probably cost substantially as much to administer as a contributory system.

Contributory
System
Preferred
for Future
Entrants

A system requiring the employees to contribute all or a portion of their retirement allowances from their salaries seems infinitely to be preferred to a wholly non-contributory system for future entrants for the following reasons:

1. It forces all parties, the government, the employees and the public to recognize the fact that retirement allowances are not benevolent grants nor rewards for meritorious conduct, but are part of the employee's compensation for services rendered, paid in this form for the common advantages of the government, the employee and the public and hence

- a. The government will have to recognize that any movement to reduce benefits is a movement not to curtail a charity but to reduce compensation.
- b. The employees can take their benefits with no greater danger to their moral fiber than is involved in accepting their salaries.
- c. The public will regard the retirement problem as one of compensation and not one of special privilege to a particular class.

2. It tends to prevent the employees from organizing to secure increases in retirement allowances without consideration of cost, and hence lessens the danger of establishing a "pension graft."

3. It facilitates the development of an equitable and adequate system. Under a non-contributory system, the equities of an employee can be recognized only by varying benefits in proportion to cost. Under a wholly or partially contributory system, the equities can be recognized both by varying benefits and by varying contributions. Optional benefits can, moreover, be best provided for under a contribution system.

4. It leads almost inevitably to the establishment of a fund and ultimately to its operation on an actual reserve basis.

CONCLUSIONS

With some misgivings and mental reservations, the writer is inclined to conclude that the partially contributory system is to be preferred to the wholly contributory, on two grounds, first that it simplifies correlating the temporary system devised for present employees with the permanent system devised for future entrants, and second, that it gives recognition to the fact that the government and the employees are mutually interested in the success of the system. The danger of this distribution of the cost is, however, that many persons will regard the part of the cost borne by the government as being in the nature of a charitable grant. If in establishing a retirement system, a new salary scale could be adopted for future entrants, distinct from that for present employees, from which new salaries the entire cost of benefits would be deducted in the case of future entrants, whereas the old salary scale would be left for present employees who must anyway receive part of their benefits at the expense of the government, a fairly definite conclusion could be drawn in favor of the wholly contributory system for future entrants. The fact that the salaries were raised in lieu of contribution by the government would of course have to be definitely stated in the pamphlet descriptive of the system, with which every employee should always be supplied on entering a service in which retirement benefits are provided.

Partially
Contrib-
utory System
Preferred
to Wholly
Contrib-
utory

Under a partially contributory system, the government's contributions, it would seem, should be either the same amount for each employee or the same proportion of salary for each employee. Those differences which arise in cost of benefits from personal differences between employees should result in differences between what individuals pay for their own allowances and not in differences in what the government pays in their behalf.

The basis of division between the government and its future employees should probably be determined for the employee of the typical entrance age. Individual employees should pay the difference between the total cost of their al-

RETIREMENT OF PUBLIC EMPLOYEES

lowances and the amount paid by the government for the typical employee.

Half and
Half
Division

The half and half division with the typical employee has the merit of apparent fairness and simplicity. It would doubtless be just, however, to recognize the difference in the interests of the parties in the different benefits, and have the government bear more of the cost for superannuation and disability benefits than for benefits in event of death in the active service from ordinary causes, or in event of withdrawal. Benefits in event of service accidents or diseases should be borne entirely by the government, whereas optional benefits should be paid for wholly by the employee.

Suggested
Method of
Salary
Deductions

To simplify accounting and to facilitate the granting of optional benefits, the English practice of paying a smaller fraction than one-twelfth of salary monthly or of one-twenty-fourth semi-monthly should probably be adopted. From the amounts thus withheld from the employee the retirement system managers would then quarterly or semi-annually deduct such sums as the employee owed the system and pay the balance to the employee like an insurance dividend. If these balances were payable semi-annually or June 1 and December 1 the system would have its obvious advantages in providing vacation or Christmas money for those who so chose to use it.⁴

Indirect Contributions by Government. Whatever basis is settled upon for dividing the special costs the government ought to make the following indirect contributions:

1. The expenses of management.
2. Such sums as may be necessary to bring the earnings of

⁴ In mentioning this system the writer has always referred to it as the English system. Before he knew it was in use in England, it was suggested to him by Mr. George B. Buck, Actuary of the Mayor's Pension Commission of New York, as an entirely feasible method of overcoming the objection to salary retents. Under this system the existing pay-roll machinery is in no way affected. New pay tables are prepared substituting a fraction of say one-sixteenth for one-twelfth in fixing the amount of a monthly check.

CONCLUSIONS

the fund up to the rate of interest used in making the computations to fix premiums or contributions. If a reasonable and conservative rate of interest is assumed this guarantee should be purely a contingent liability under which the government will never be called upon to make heavy contributions.

3. The government should guarantee the solvency of the system, making good such deficiencies as may arise from mistakes which it made in establishing this system.

Regarding the conclusion in favor of a government guarantee of the solvency of the fund, a word or two of explanation should be given. The consideration which the government offers for services is composed of two principal parts: (1) immediate wages and (2) benefits under the retirement system. No one would argue for a moment that the government should refuse to pay the wage actually promised an employee because some expert employed by the government had made an error in his calculation whereby the work which the employee was called upon to perform was costing more than was expected. The same reasoning would seem to be even more applicable to retirement benefits, because in the absence of a governmental guarantee the damage sustained by the employee through an error in calculations may be irreparable. Failure to pay promised wages becomes apparent comparatively soon, and the employee can seek other employment, but failure to pay promised retirement benefits does not become apparent until some employees are already old and then they cannot make other provisions. The doctrine of *caveat emptor* can scarcely be applied to employees purchasing retirement benefits by their services; it cannot fairly be said to the employee connected with a bankrupt compulsory fund, "You knew the terms of the retirement law; you should have known that the assets provided were insufficient to meet liabilities." Few employees have the technical knowledge to tell whether

Guarantee
of Solvency

RETIREMENT OF PUBLIC EMPLOYEES

or not assets will equal liabilities even if they had the funds and the opportunity to make the fairly elaborated and costly actuarial computations necessary to determine that fact. The credit of the government should be pledged to make good its own miscalculations in retirement benefits just as it is pledged to make good its own miscalculations in matters of wages. If the retirement system has been devised by the employees in the first instance and has been ratified by the government, the mistake of fact then becomes mutual in respect to the government and those who were in the service when the system was established. Those employees have not so sound a case for a guarantee as have future entrants. A new scheme for future entrants, however, should always include a guarantee.

THE ORGANIZATION AND MANAGEMENT OF FUND

The Actuarial Fund Preferred. The system established should be operated on the actuarial reserve basis, that is to say, at the time services are rendered the government should pay all the obligations it has incurred in respect to these services, the immediate wage being paid to the employee in cash and the cost of the prospective retirement allowances arising from those services being paid into an actuarial reserve fund to be invested in approved securities until utilized, with the interest it will have earned, to pay the benefits as they mature. The rates of payment into the fund should be scientifically determined by a skilled actuary so that the amount paid into the fund at the time the services are rendered will be just sufficient with the interest it will earn to provide the benefits. Such a system is markedly superior to the assessments or cash disbursement system under which the government pays at the time the services are rendered only the immediate wage, and makes no provision for the payment of retirement claims until the employee has actually retired and then meets the charges from the current revenues of the state. The merits and defects of these two systems has been discussed at length in Chapter XV, and hence only the briefest summary of the four

CONCLUSIONS

main reasons for preferring the actuarial reserve system will be given in these conclusions. They are as follows:

1. The actuarial reserve system is equitable as between successive generations of taxpayers, because each generation pays all the obligations incurred for services rendered to that generation, whereas under the assessment or cash disbursement system the generation of taxpayers establishing the system pays little more than the immediate wage and subsequent generations pay the immediate wage for service rendered them and the retirement allowances for services rendered an earlier generation.

Equitable
as Between
Successive
Generations
of Tax-
payers

2. The actuarial reserve system is businesslike and conducive to good management, because all obligations are recorded when incurred and suitable provision is at once made for meeting them when they mature; whereas under the assessment or cash disbursement system little consideration may be given the real cost of the service, the immediate wage only may be considered, and a large and unmeasured obligation may be passed on to the future with absolutely no provision to meet it.

Conducive
to Good
Manage-
ment

3. The actuarial reserve system tends to safeguard the system from popular and legislative misunderstanding and attack because it makes the amount of the burden fairly uniform from year to year, and since a considerable part of the required payments are met by the interest earned from the fund, it makes the apparent burden, if not the real burden, materially less. The assessment or cash disbursement system on the other hand lays the system open to popular and legislative misunderstanding and attack because for many years the burden on the taxpayers is a constantly increasing one, and since no interest is earned by any fund to supplement the direct amounts paid by the taxpayers, the whole cost must be collected directly from the taxpayers.

Safeguard
from
Legislative
Attack

4. The actuarial reserve system is adaptable. It easily meets the needs of a contributory system and it makes returns of contributions or their equivalent in event of death, resigna-

Adaptable

RETIREMENT OF PUBLIC EMPLOYEES

tion or dismissal easy, because the data for determining the amount due are already collected and tabulated and the reserve fund accumulating at interest is the proper source from which to make such payments and they are immediately at hand and necessitate no special appropriation. The assessment or cash disbursement system is not thus adaptable.

Necessary Safeguards. To guard against the possible dangers arising from the establishment of a large fund the law should provide

1. The management of the fund by a nonpartisan board of trustees, the membership of which should be changed gradually, so that no single administration can, except in very exceptional cases, appoint more than a third of the number.
2. For binding all officials directly responsible for handling the funds.
3. For restricting the field in which funds can be invested so that the investments will be conservative and for limiting the amount that can be placed in any one way so that they will be properly diversified.

An Actuary Required. The services of a properly qualified actuary will be required both in establishing the fund in the first instance and in operating it on a permanently solvent basis after it is once established.

Duties of the Actuary

In devising the system in the first instances the actuary has two important duties to perform: (1) to fix the initial premium rates and (2) to install an adequate system or records so that future actuarial valuations may be made accurately and cheaply. In subsequent valuations he has again two important duties: (1) to determine the exact financial condition of the fund and (2) to make such changes in rates of contribution as are essential to maintain the fund in a constant state of solvency.

CONCLUSIONS

The work of the actuary in valuing a fund which has already been established involves four distinct processes:

Four
Processes
in
Valuation

1. Determining by analysis the forces upon which the cost of the benefits depend.
2. Determining by the collection and tabulating of data at what rates these various forces have been operating in the immediate past.
3. Preparing rates, on the basis of those for the past, to show how the forces may be expected to operate.
4. Determining the money values and premium rates by the use of these rates.

When the actuary is called upon to establish a new fund he cannot get all the necessary rates from past experience, but he has to make a careful examination of all available data to indicate what rates to adopt from other funds to use for the first few years until special rates can be developed from the actual experience of the fund itself. Past experience has abundantly demonstrated that the experience of one fund cannot be used permanently in valuing another, for each fund is a law unto itself. One of the most important tasks before the actuary in establishing a fund in the first instance is to install a system of records that will facilitate the development of rates as soon as a sufficient body of data become available.

This brief description of the actuarial work should be sufficient to distinguish it from accounting and to demonstrate that it is a special science. Legislators should no more undertake to develop a retirement system without expert actuarial advice than they should undertake to have an elaborate and costly bridge built without the services of an engineer.

Treatment of Small Services. If the service for which a retirement system is desired is very small, too small to give scope for the operation of the rule of averages on which actuarial work depends, an actuarial reserve system is out of the

The State
an Agency
for Small
Systems

RETIREMENT OF PUBLIC EMPLOYEES

question for that service by itself. The ideal solution for such a problem is probably to get some central authority to bring together a group of small units in a single organization. The state, for example, could operate a retirement system for all the small local units, or for such of the local units as cared to coöperate. The state would then serve as the insurance carrier while the local units bore the cost of retiring their own employees, by paying the necessary premiums to the state system. In developing such a system the equities as between different communities and classes of communities become a question for consideration, but in general this question is similar to that of the equities as between employees. It is vastly simplified by the establishment of a system giving equality of return in the superannuation benefit and equal protection for equal premiums in the disability benefit.

A Single State System

Since the small local units cannot have separate systems, but must depend on the state for the establishment of a centralized system, it would seem as if one system for the state as a whole would be preferable to independent systems for the larger communities and a state system for the units too small to provide for themselves. A single state system could be better administered for the same expenditure and it would permit of considerable movement of employees about the state.

Insurance with Private Companies

If the small community finds it impossible to get the state to serve as an insurance carrier, the only other solution is to make as good a system as possible through insurance with private companies. To get adequate protection against ordinary disability from a private company would probably prove very difficult if not prohibitively expensive. Provisions for superannuation and for life insurance can of course be made in this way, and the locality should be able to secure considerable reductions in the premiums charged private individuals if it collects the premiums from the employees. Insurance with private companies appears, however, to be a makeshift provision to be turned to only as a last resort.

CONCLUSIONS

Indirect Appropriations Undesirable. All appropriations made by the government for retirement allowances should probably appear in a single item in the appropriation act supported by a schedule showing their distribution. All indirect contributions and permanent appropriations are bad. The system, for example, should never be given permanently a certain proportion of the excise taxes, nor the unexpended balance of certain appropriations, nor the income from the sale of condemned property, nor the fines for drunkenness, nor the fines imposed on police officers for infractions of police rules. To a peculiar degree retirement systems demand that public control that can only come from keeping the facts continually in the light.

Protecting System from Financial Indiscretion of Employees. After all the machinery has been carefully worked out the public may still be left with a dependent ex-public servant to support in his old age unless proper precautions are taken to protect all parties from the financial indiscretion of retired employees. The general rule should be to pay superannuation and disability benefits only in annuities, and if it is desired to prevent employees from withdrawing from the service for the sake of getting possession of their reserves under the system, their accumulation on withdrawal may be held to the retirement age and then paid as annuities. This rule should not, however, be applied to benefits in event of death, for in these benefits the important point is to preserve flexibility.

THE PRESENT EMPLOYEES

The preceding discussion has related solely to the problems involved in devising a retirement system for the employees who enter the service after the system has been established. These future entrants, as they are called in retirement terminology, are by far the more important class to be considered in planning a system, for its permanent success depends on its adequacy as applied to them. Provision for present employees

RETIREMENT OF PUBLIC EMPLOYEES

is, however, a matter of grave importance and constitutes a distinct problem, requiring separate treatment.

Six Differences Between Present Employees and Future Entrants. That separate treatment is necessary becomes obvious on reviewing the six principal differences that distinguish the present employees from the future entrants. These differences relate (1) to their homogeneity, (2) to their economic relation to the retirement system, (3) to the period of social evolution in which they live, (4) to their desire for certain benefits, (5) to their ability to pay for or to assist in paying for their benefits and (6) to their susceptibility to moral injury from free pension grants. These differences have been treated at length in the chapter on present employees (pages 290-300), but they are such essential elements in the retirement problem that a brief summary of the main points is worth while.

Differences
as to
Homogeneity

Each annual class of new entrants is obviously a strikingly homogeneous group. Although a few individual members of it may vary rather widely from the average in respect to age—and all that age implies in respect to marital conditions and general outlook on life—yet to describe an average member who would be fairly and reasonably typical of the whole group would not be difficult. For such a homogeneous group, a legislative body could plan with a high degree of definiteness and certainty. The present employees on the other hand are a heterogeneous collection of the survivors of all the different entrance classes of the last fifty years or more, if the service has been in existence that long. They vary in age from the dean of the service to the youngest new entrant, and these differences in age carry with them differences in marital condition, family responsibilities, earnings, and so forth. Legislating for a heterogeneous group of present employees is in some ways a far more complex problem than legislating for a homogeneous group of new entrants.

The future entrants, it has been seen, earn their benefits by

CONCLUSIONS

their services and hence the problem in devising a system for them is to work out a well-balanced adjustment between payments for immediate consumption and deferred payments to provide against the various possible untoward contingencies to which the employee is exposed. Economically, it is all a question of compensation or wages. The economic relation of present employees to the system cannot be so summarily disposed of because the employees are not a homogeneous group. Two distinct classes must be recognized: (1) those who will be retired immediately upon the adoption of the system and (2) those who will be retained and will render service after the adoption of the system. The services of this second class must be divided into (a) that rendered prior to the adoption of the system and (b) that rendered subsequently.

Differences
as to
Economic
Relation
to Retirement System

So far as the employees are concerned, the benefits paid in respect to past services to those who are retired immediately upon the adoption of the system partake of the nature of gratuities. The only ground apparently upon which the employees may claim them as of right is that they are liquidated damages paid to them by the government to compensate them for the loss of that prospect of retention in the service so long as they were able to fulfill the minimum attendance requirement which was theirs when they entered it, and which, under the name of permanency of employment, or permanency of tenure, may have been one of the inducements to enter and to remain in it. The employees may allege that the government, having taken from them the opportunity to work until late old age, compensates them by providing for all old age insurance. Obviously this claim has no legal validity and it has no ethical validity unless compulsory retirement provisions are established and enforced. Thus its weight would turn on the rigidity of these requirements and on the actual conditions that prevailed in the service prior to the adoption of the system.

Benefits for past services to present employees who remain

RETIREMENT OF PUBLIC EMPLOYEES

on the active rolls after the system is established may operate as an inducement to certain individual employees to remain in the employ of the government, who would otherwise have resigned. In such instances, these benefits partake of the nature of lump sum awards for continuous service. They are earned by the employees perhaps, although they are not earned from day to day as in the case of benefits for future services.

Benefits for future services tend to become part of the compensation for services rendered. At the moment the retirement system is adopted, the incidence of their cost is upon the taxpayers in so far as the government contributes to the system, for the taxpayers are paying more today than they did yesterday for the same service. Immediately following the adoption of the system economic forces begin to operate, tending to shift the incidence to the employees. The government and, through it, the taxpayers, retain some employees who would otherwise have left and the whole history of the service is changed. The general conclusion can in fact be laid down that the moment prospective retirement benefits become an inducement to employees to enter or to remain in the service they become part of the employee's compensation for services rendered.

Differences
as to
Period
of Social
Evolution

The future entrants render all their service in a period of social evolution in which a system of compulsory savings has been applied to them. In legislating for them, it may be assumed that they have made no other provision against the contingencies covered and that any future provision which they will make will be supplementary. The present employees have rendered the whole, or a part of their active service, in a period of social evolution in which to each individual employee was left the responsibility of providing against the various untoward contingencies of life. Grants to present employees in respect to past services are therefore to supplement such private provision as he may already have made. In legislating for them, it should not be assumed that they have as a class uniformly failed in meeting their obvious re-

CONCLUSIONS

sponsibilities, but that they have made some provision and that the benefits granted by the retirement system are supplemental and not the main trenches of their system of economic defense.

Future entrants, as has been seen, will desire benefits in respect to all the important contingencies that may arise affecting their positions. The younger present employees will closely resemble them in this respect, whereas the older present employees will attach little or no importance to benefits in event of early death or early disability, or of resignation or dismissal, but will regard a retirement system as synonymous with a superannuation system, and they will be satisfied with a system giving superannuation benefits only, if some provision is made for an allowance to the widow in case of death soon after entrance upon the pension.

Differences
in the Desire
for Certain
Benefits

The cost of a superannuation benefit of a dollar a year first payment at age of seventy is of course the same for all employees at seventy regardless of whether the retirement system was in force when they entered the service or not. The difference between the future entrants and the present employees lies in this; the future entrants have all the time between their appointment and their ultimate retirement in which to accumulate the cost of their superannuation benefit, and since that period is usually long they receive marked assistance from interest in a system operated on the actuarial reserve basis; the present employees, on the other hand, have, as a class, a far shorter time in which they might accumulate the cost and they can receive little assistance from interest. The present employee who is to be retired immediately has, in fact, no time to accumulate anything, and unless he already has saved several thousand dollars, he could not pay the cost of a modest superannuation retirement allowance of a few hundred dollars a year. The present employees, therefore, cannot as a class be called upon to bear the full cost of their retirement allowances.

Differences
in the
Ability
to Pay for
the Benefits

The ability of the present employees to pay even these con-

RETIREMENT OF PUBLIC EMPLOYEES

tributions which they would now be paying had the system been in force when they first entered the service is undoubtedly less than the ability of the future entrants to pay exactly the same contributions. The future entrant as a rule accepts the government position because it is the best he can get. He pays contributions to the retirement service as a matter of course; in fact, he never notices the payments particularly, because they are withheld from his salary. The present employee, on the other hand, has been in the habit of receiving full salary to do with as he will and his habits of living are adjusted on that basis. When contributions to a retirement system are required he has to readjust his affairs to meet the changed situation. That this change is necessarily for his own good is not a conclusive presumption. In many cases it involves hardship and sacrifices either in curtailing wise expenditures or in abandoning existing investments and insurance. The present employee always has to readjust his affairs to meet contributions unless salaries are raised, whereas the future entrant has to make no readjustments other than those always involved in taking a new position.

Suscepti-
bility to
Moral
Injury

The future entrants will render all their service subject to the moral influences of the retirement system, and hence it is of the utmost importance that the system be so devised that it will promote rather than check self-development. The system must not operate to tie a man to his position when that position no longer means anything more to him than salary and security. It must leave him free to make the most of himself. The future entrant must realize and the public must realize that the benefits paid him are part of his compensation and that he takes them as of right and not as of grace. The younger present employees resemble the future entrants in these respects, but the older present employees do not. They have lived their lives free from the pension influence and they come upon their allowances unexpectedly in the later years of life. They can accept a gratuity gracefully without permitting it to warp them in any way. They have

CONCLUSIONS

had their freedom, and having had it, they cannot barter it for a doubtful benefit.

Consideration of these differences between the present employees and the future entrants would seem to warrant the following reasonably concrete conclusions:

Present Employees Must Be Specially Provided For. The present employees differ so radically from the future entrants that it is unwise to attempt to provide a single system applicable to both. The future entrants should be provided for in a comprehensive adequate manner, whereas a temporary transitional system should be devised for the present employees, that may contain several make-shift devices.

Different Classes of Present Employees. In planning the system for present employees, since they are not a homogeneous class, it is necessary to distinguish between (1) the employees who will be retired immediately upon the adoption of the system and (2) those who will be retained after its adoption. In thinking of this latter group, if not in the actual drafting of the retirement legislation applicable to it, it is well to differentiate between (a) the service rendered prior to the creation of the system and (b) that rendered subsequently.

Benefits for Past Services—Employees Retired Immediately. Benefits in respect to past services paid to the employees retired immediately upon the creation of the retirement system must be granted at the expense of the taxpayers. Except in so far as the employees may be justified in regarding such payments as liquidated damages for changes made in the original conditions of employment, they are gratuities granted by the state as the purchase price of a service-improving device. They are to supplement the provision that the employee has already made under the more highly individualistic régime and they are not assumed to be the employee's only provision for old age. In view of these facts,

Must Be
Granted at
the Expense
of the
Taxpayer

RETIREMENT OF PUBLIC EMPLOYEES

the cost of these benefits must be kept low (1) by granting benefits only in event of superannuation,⁵ (2) by setting a high initial compulsory retirement age, and (3) by placing the amount of the benefit at a low figure.

Standard
Benefit
Should
Equal
Minimum of
Subsistence

The standard benefit, it would seem, should be approximately the minimum of subsistence in the case of the employee who entered the service at the usual or ordinary entrance age and served continuously to the compulsory age. For the employee who has served a shorter period the benefit should be proportionately less, being figured as so much for each year of service. A maximum should be fixed above which the allowance should not go.

These conclusions, it will be noted, reject the device of relating benefits to salaries, either directly or indirectly, although for future entrants to a complex service indirect relationship to salary is regarded as desirable. The reason for the difference is that benefits for past services are supplemental gratuities added to what a man may have, and should have, saved privately; whereas benefits for future services are earned by the employee and become the backbone of his system of provision against future contingencies.

No minimum limit on the amount of the superannuation benefit paid to employees retired immediately upon the adoption of the retirement system is here recommended. It is needed only in case an employee has been appointed late in life and has served but a few years. A few years' service hardly creates a particularly heavy obligation upon the government, and the fairer procedure would seem to be to assume that the employee has made other provision and to leave the cases in which such is not the fact to the various public

⁵ To meet the demands of the employees and to make the system more flexible as a transitional device, it might be wise to provide that the employee might be permitted on retirement to apply the present value of his prospective life annuity either to the purchase of said life annuity or to the purchase of a smaller, last survivor annuity for himself and one dependent, presumably his wife, or to the purchase of an annuity with a certain number of payments guaranteed.

CONCLUSIONS

and private agencies administering relief rather than to give all employees of short service a comparatively high benefit without regard to their need.

Benefits in Respect to Past Services—Employees Continued in Active Service. Benefits in respect to the past services of employees who will be continued on the pay roll after the adoption of the system should apparently also be paid for entirely at the expense of the taxpayers, though it might be advisable to give the employees the option entirely at their own expense to purchase additions to these benefits granted by the government. The cost of these allowances must be kept low (1) by allowing benefits only in event of superannuation or disability (2) by making the conditions for a grant rigid and (3) by keeping the amount of benefit low.

Should
Be Paid
at the
Taxpayer's
Expense

A device that appears to be meritorious is to allow to all present employees who entered at or after the ordinary or usual entrance age and who will be continued on the active rolls, the same annuity as a superannuation allowance per year of service rendered, as is granted to the employees retired immediately. To the employees who entered at an earlier age, a smaller amount would be promised for each year of service so calculated that one entering at that age and serving continuously to the compulsory retirement age would receive the maximum benefit for past services.

The progressively diminishing compulsory superannuation age deserves mention in these conclusions. The proposal is that at the inception of the system the compulsory retirement age shall be placed several years above that regarded as ideal for future entrants and that at stated intervals, say, on each quinquennial anniversary of the system it should be reduced by one year until finally it reaches the age established for future entrants. Such a device provides for a more gradual transition from the old system to the new, reduces the number of cases in which employees are suddenly dropped from active salaries to low pensions without much warning and also re-

Progres-
sively
Diminishing
Compulsory
Age

RETIREMENT OF PUBLIC EMPLOYEES

duces somewhat the burdens placed on the taxpayers for benefits in respect to past services.

On a
Savings
and
Annuity
Basis

Benefits for Future Services of Present Employees. Full acceptance of the theory that benefits in respect to future services become part of the compensation and that equal services should receive equal rewards would lead to the adoption of a savings and annuity system for the future services of present employees and the government would pay to the present employee's account the same amount or the same proportion of salary which it would pay in respect to a future entrant. If the annual contributions for future entrants are varied according to age and sex, and the government pays half and the employee half, the appropriate procedure in the case of present employees would apparently be for the government to pay the costs of such benefits as it chooses to grant in respect to the past services of present employees and in respect to their future services to pay that amount which it would now be paying in their behalf had the system been in force when they first entered the service.

Options
Regarding
Employees'
Contribu-
tions

The question of exacting contributions from present employees even for future services without any readjustment of salaries is one demanding full consideration. Since benefits for future services are part of compensation, the government should make whatever contributions it is to make unconditionally, but it would seem that it might well grant the employees some option regarding their own contributions, in order to allow for the fact that present employees may already have investments that would be sacrificed if heavy contributions were enforced.

Older
Employees
May Waive
Benefits
Other Than
for Super-
annuation

The rights of the present employees to benefits on death, resignation and dismissal in respect to future services should probably be respected, though it might be advantageous to permit the older present employees to waive these rights to secure a larger superannuation benefit. A waiver in the case of the younger present employees would, however, be unde-

CONCLUSIONS

sirable, because it would limit their freedom of contract, and it would likewise impede their dismissal if they became unsatisfactory.

The Actuarial Deficit on Creating a System. When a retirement system is created to pay benefits to present employees in respect to past services it obviously starts with a large deficit, because neither the government nor the employees have been paying the premiums that would have been necessary to accumulate an actuarial reserve sufficient to meet the prospective retirement claims. In the case of the aged present employee, the entire cost of his prospective superannuation allowance is a deficit, whereas in the case of the young employee who has served but a little while, the deficit is only a small amount. The total of all individual deficits is, however, a very large amount in proportion to the pay roll, and meeting it is one of the important financial problems involved in establishing a system.

Important
Financial
Problem

If no special provision is made to meet it, that is, if benefits in respect to past services are paid as they come due from the current revenues of the state, the burden on the taxpayer for these benefits will rapidly increase for a number of years, and then it will diminish until ultimately it vanishes when the last of the present employees has died. To follow this course seems undesirable, because it is likely to make the system unpopular and because it frequently leads to grants of large benefits without sufficient attention being given to their real cost. Two possible courses may be mentioned as deserving attention: (1) Paying off the deficit on the installment plan and (2) the creation of a perpetuity. Under the first scheme arrangements are made whereby each year the taxpayers pay either (a) a fixed amount which is used first to pay the interest on the debt and then to curtail the principal or (b) a fixed amount to curtail the principal and the interest due on the balance remaining unpaid. The payments should be so figured that the deficit will be wiped out in about sixty years.

Two
Possible
Courses

RETIREMENT OF PUBLIC EMPLOYEES

Under the perpetuity plan, the deficit is never wiped out: the government issues bonds for the amount which are turned over to the superannuation fund. When the principal of these bonds is required for pension claims of present employees, the bonds are purchased by the retirement fund with the accumulations arising from the contributions made by or in behalf of the future entrants. The taxpayers under this system always have to pay the interest, but they are never called upon to pay the principal unless the retirement system is wound up. The method of installment payment appears to be the proper one to follow in financing the retirement benefits for past services.

In ending these conclusions, it is perhaps well to repeat the thought given at the beginning. They are not immutable, they are rather *prima facie*. The important points are to adopt a system that will be financially sound, that will meet the needs of the service to which it is applied, that will be just to the employees as a class and to individual employees, and that will receive the approval of a public enlightened as to the possibilities of a retirement system as a social insurance device, the benefits of which are earned by the employees.

APPENDIX

LIST OF REFERENCES

The list of references given below is not presented by any means as an exhaustive bibliography. It contains the more important records, reports and writings examined in the preparation of the present book.

First are given the reports and documents of governmental agencies and quasi-public organizations, and then the more general discussions not in documents and reports. References to workmen's compensation material are not included. A few references are given to works on social insurance in general. They are included because in several instances it has seemed advisable to quote from them. Many important works on social insurance are not mentioned, however, and hence the list should not be regarded at all as a bibliography on old age pensions in general.

REPORTS AND DOCUMENTS

(Important Documents Are Marked with Asterisks.)

THE UNITED STATES

The Federal Government:

Reports of the Committee on Departmental Methods:
Washington, 1906.

Departmental Methods Committee, Sub-committee on
Personnel, "Superannuation of government em-
ployees" in *Government Accountant*, Washington,
1907, Vol. I.

Statistics of Employees: Executive Civil Service of the

RETIREMENT OF PUBLIC EMPLOYEES

United States by Lewis Meriam, U. S. Census Bulletin 94, Washington, 1908.

Teachers' Pension Laws in the United States and Europe. Senate Document 823, 61st Congress, 3d Session.

- * Civil Service Retirement, Great Britain and New Zealand by Herbert D. Brown, Senate Document 290, 61st Congress, 2nd Session. Reprinted as Appendix B, House Document 732, 62d Congress, 2nd Session.

Civil Service Retirement, New South Wales, Australia, by Herbert D. Brown. Senate Doc. 420, 61st Congress, 2d Sess. Reprinted as Appendix C of House Document 732, 62d Cong., 2d Session.

Retirement of employees of the Classified Civil Service, U. S. Cong. House Committee on Reform in Civil Service, Report of Committee, 1910.

- * Savings and Annuity Plan Proposed for Retirement of Superannuated Civil Service Employees, by Herbert D. Brown, Senate Document No. 745, 61st Congress, 3d Session. Reprinted as Appendix A, House Document 732, 62d Congress, 2d Session.

Reclassification and Retirement of employees in the Classified Civil Service. Preliminary hearing before House Committee on Reform in the Civil Service in House of Representatives Bills 729, 750, 1298, 9242 and 11661, May 27 and June 1, 1911.

- * Retirement of Employees in the Classified Civil Service, No. 4, Hearings before the Committee on Reform in the Civil Service, Jan. 17-18, 1912.
- ** Retirement from the Classified Civil Service of Superannuated Employees. Message from the President of the United States transmitting report of the Commission on Economy and Efficiency on the subject of Retirement from the Classified Civil Service of Superannuated Employees. Contains as reprints Mr. Herbert D. Brown's Civil Service Retirement, Great Britain and New Zealand, his Civil Service Retirement, New

APPENDIX

South Wales, Australia, and his Savings and Annuity Plan for Retirement of Superannuated Civil Service Employees. House Document 732, 62d Congress, 2d Session.

* Teachers' Pension Systems in Great Britain by Raymond W. Sies. U. S. Bureau of Education, Series No. 34, Whole No. 544, 1913.

** Contributory Plan of Retirement of Employees in the Classified Service. Hearings before the House Committee on Reform in the Civil Service, 63d Congress, 2d Session. Feb. 20 and March 6, 1914. (Contains address by Miles M. Dawson before the American Civic League, Washington, D. C. Dec. 28, 1911.)

Indefinite Leaves of Absence to Superannuated Employees of the Postal Service. Hearings on House of Representatives Bill 6915, House Committee on Post Offices and Post Roads, April 7-8, 1916.

Retirement of Postal Employees, Hearings on House of Representatives Bill 10130, House Committee on Post Offices and Post Roads, April 12, 1916.

* Retirement of Employees in Classified Service. Hearing before the Committee on Reform in the Civil Service. House of Representatives, 64th Congress, 1st Sess., April 28, 1916.

The Annual Reports of the U. S. Civil Service Commission.

The Commonwealth of Massachusetts:

* Old Age Pensions, Annuities and Insurance. House Document No. 1400, Boston, January, 1910.

Massachusetts Board of Education. Special Report on Teachers' Retirement Allowances. House Document No. 1920, Boston, 1913.

** Report of the Massachusetts Commission on Pensions. House Document 2450, Boston, 1914.

RETIREMENT OF PUBLIC EMPLOYEES

The Retirement System for Employees of the Commonwealth. Circular Explanatory of the Provisions of Chapter 532, Act of the year 1911 and acts in amendment thereof and in addition thereto, Boston, 1914.

The City of New York:

- * The Condition of the Public School Teachers' Retirement Fund of New York City, by Wm. A. Hutchinson, Actuary of the Mutual Life Insurance Company, in the 6th Annual Report of the Secretary of the Board of Retirement, New York, 1913.
- * Report on the Police Pension Fund of the City of New York. Interpretative section by Mr. Robert von Reutlinger. Actuarial section by Mr. George B. Buck. The (New York) Bureau of Municipal Research, 1913.
- * Report on Teachers' Retirement Fund. The Mayor's Commission on Pensions. Interpretative section by Mr. Robert von Reutlinger. Actuarial section by Mr. George B. Buck, New York, 1915.
- Report on the Cost of Living for an Unskilled Laborer's Family in New York City. Submitted by the Bureau of Standards to the Committee on Salaries and Grades of the Board of Estimates and Apportionment, New York, 1914. (Contains bibliography).
- ** Report on the Pension Funds of the City of New York. The Mayor's Commission on Pensions.
 - Part I—Operation of the Nine Existing Pension Funds, by Mr. Robert von Reutlinger, New York, 1916.
 - Part II—An Actuarial Investigation of the Mortality and Service Experience of the Special and General Service Funds for Municipal Employees by Mr. George B. Buck, New York, 1916.
(A third part is in preparation.)

APPENDIX

The Government of the Philippine Islands:

Pension and Retirement Fund for the Philippine Constabulary. Report of a Committee appointed May 12, 1912, to study the question of a pension and retirement fund for the Philippine Constabulary and to prepare a bill for presentation to the Philippine legislature. Manila Bureau of Printing, 1912.

The Carnegie Foundation for the Advancement of Teaching:

- * Annual reports from 1906 to date, especially the more recent ones. New York.
- ** Bulletin 9, "A Comprehensive Plan of Savings and Annuities for College Teachers" by Henry S. Pritchett, New York, 1916.

The National Civil Service Reform League:

Superannuation in the Civil Service. New York, 1901.
Superannuation in the Civil Service. New York, 1906.
Superannuation in the Civil Service. New York, 1907.
Civil Pensions for Federal Employees. New York, 1909.

The New York Civil Service Reform League:

Retirement Legislation.

The National Civic Federation:

The Problem of Pensions, Federal, State, Municipal and Industrial, New York, 1916. Contains address by William R. Willcox, Chairman of the Pension Department; Pensions for State Employees by Mr. F. Spencer Baldwin; Pensions for Municipal Employees by Leonard Blakey; and Industrial Pension or Retirement Systems.

GREAT BRITAIN AND IRELAND

The National Civil Service (References are to the British Parliamentary Papers):

RETIREMENT OF PUBLIC EMPLOYEES

Report from the Select Committee Appointed to examine and consider what regulations and checks have been established to control the several branches of the public expenditure in Great Britain and Ireland, 1807, Vol. II, 1808, Vol. III, 1809, Vol. III.

Third Report from the Select Committee on the Public Income and Expenditures of the United Kingdom; Superannuations; Military and Naval Half Pay; Widows' Pensions, Pensions to soldiers and sailors for length of service, Civil Superannuation Allowances and pensions to foreign ministers, 1828, Vol. V.

Memorial from the civil servants of the Crown, presented to the Treasury in 1848 for the conversion of abatements from salaries into a provident fund, etc., 1852-53, Vol. LVII.

Letter to the late Chancellor of the Exchequer dated 7th Dec., 1853, from the members of a general committee of civil servants of the Crown, relating to the establishment of a civil service provident fund, etc., 1854-55, Vol. XXX.

Report from the Select Committee on Civil Service Superannuation, 1856, Vol. IX.

Report from the Commissioners appointed to inquire into the Operation of the Superannuation Act, 1857, Vol. XXIV.

Supplemental Report of Commissioners appointed to inquire into the operation of the Superannuation Act, 1857-58, Vol. XXV. (Contains the report of the actuaries, Ansell and Morgan.)

Correspondence between the Science and Art Department and the Treasury relative to Superannuation and Sick Allowances, 1887, Vol. LXV, and 1888, Vol. LXXVIII.

* First Report of the Royal Commission appointed to inquire into the Civil Establishments of the different offices of State at Home and Abroad, 1887, Vol. XIX.

APPENDIX

Second Report of the Royal Commission appointed to inquire into the Civil Establishment of the different offices of State at Home and Abroad, Vol. XXVII.

Report from the Select Committee on Workmen (Woolwich Arsenal) (As to their right to pensions), 1889, Vol. XVI. For preliminary correspondence see 1887, Vol. LI. (Of interest in considering pensions as wages and the necessity for clear statement of retirement privileges to all new entrants.)

Fourth Report of the Royal Commission appointed to inquire into the Civil Establishment of the different offices at home and abroad, 1890, Vol. XXVII.

Report from the Select Committee on the Superannuation Acts Amendment (No. 2). Bill with the proceedings and evidence, 1892, Vol. XVII.

Memorial of Civil Servants to the Treasury, 1899, Vol. LXXVIII.

** Report of the Royal Commission on Superannuation in the Civil Service, 1903, Vol. XXXIII.

Report of an Inter-Departmental Committee on Employment under the Crown, as affected by Part I of the National Insurance Act, 1911. 1912-13, Vol. XLII.

Teachers (References Are to the British Parliamentary Papers):

School Teachers. Report of Committee whether by deductions from the Parliamentary grant in aid of Elementary Schools or any other means. Annuities may be granted to certified Teachers on their retirement by reason of age and infirmity, 1872, Vol. IX.

* Report of Committee on the School Board, London Superannuation Bill, 1890-91, Vol. XVII.

* Report of Committee on Teachers' Superannuation, 1892, Vol. XII.

* Report of Departmental Committee on the question of

RETIREMENT OF PUBLIC EMPLOYEES

the Superannuation of Teachers in Public Elementary Schools, 1895, Vol. LXXVI.

Reports on the Valuation of the Teachers' Pension Fund (Ireland) on 31 Dec. 1900, in 1903, Vol. LIII; on Dec. 1905 in 1907, Vol. LXIV.

* First Septennial Actuarial Report on the Assets and Liabilities of the Elementary School Teachers' Deferred Annuity Fund, 1908, Vol. LXXXIII.

* Second Septennial Actuarial Report on the Assets and Liabilities of the Elementary School Teachers' Deferred Annuity Fund. H. C. paper, No. 42, for 1916.

* Second Report of the Advisory Committee on the Distribution of Exchequer Grants to the Universities and the University Colleges in England, 1912, Vol. XXVII.

* Third Report of the Advisory Committee on the Distribution of Exchequer grants to Universities and University Colleges in England, 1913, Vol. XXVI.

Reports of the Departmental Committee on the Superannuation of Teachers, 1914, Vol. XXV.

Police (References Are to the British Parliamentary Papers):

* Report from the Select Committee on Police Superannuation Funds, 1875, Vol. XIII. (Of especial value as showing the disadvantages of discretionary pensions.)

Report from the Select Committee on Police Superannuation Funds, 1877, Vol. XV.

Report from the Select Committee on the City of London police (pension) bill, 1889, Vol. IX.

Report of Departmental Committee on Metropolitan Police Superannuation, 1890, Vol. LIX.

Report from the Select Committee on Police (Scotland) (Pension, etc., Bill), 1890, Vol. XVII.

Special Report and Report from Select Committee on the Police Superannuation (Scotland) Bill, 1901, Vol. VII.

APPENDIX

Miscellaneous (in British Parliamentary Papers):

Report of Committee on the Union Officers Superannuation (Ireland) Bill, 1882, Vol. XIII.

** Report of the Board of Trade on Railway Superannuation Funds, 1910, Vol. 57, and 1911, Vol. 29. (This report is one of the most valuable documents in existence regarding retirement funds.)

Report of the Select Committee on the Asylum Officers Superannuation Bill, 1909, Vol. VI.

NOT IN BRITISH PARLIAMENTARY PAPERS

Actuaries' Report to the London School Board by Archibald Hewatt, F. I. A. FFA., 1897.

Superannuation and Provident Fund, London County Council, January, 1913.

British Colonies:

** Establishment of a Superannuation Fund for the whole of the Government Service: Report of the Committee and of the Actuarial Sub-Committee, Sydney, New South Wales, 1912.

Report on the Organization of the Public Service of Canada by Sir George Murray, 3 Geog. V. A. 1913 Sessional Papers 57A, Ottawa, 1912.

WRITINGS OTHER THAN REPORTS AND DOCUMENTS

Allen, S. J. H. W. Social conditions as affecting widows' and orphans' pension funds in *Journal of the Institute of Actuaries*, Vol. 39: 337-369, London, 1905.

Baldwin, F. Spencer. Retirement Systems for Municipal Employees in *American Academy of Political and Science Annals*, Philadelphia, 1911.

Brandeis, Louis D. Our new peonage: discretionary pensions, in *his Business a Profession*, Boston, 1914, pp. 65-81.

RETIREMENT OF PUBLIC EMPLOYEES

- Buck, George B. Valuation of Pension Funds *in* Proceedings of the Casualty Actuarial and Statistical Society of America, Vol. II, Part III, No. 6, May 26, 27, 1916, p. 370.
- Burn, Joseph and, Symmons, Frank Percy. Practical Points in Connection with the Formation and Valuation of Pension Funds *in* The Journal of the Institute of Actuaries, Vol. 49, 1915.
- Collie, Sir John, M.D., Malingering and Feigned Sickness. Edward Arnold, London, 1913.
- Dawson, Miles M. Address before the American Civil League, Washington, D. C. Dec. 28, 1911, printed in "Contributory Plan of Retirement of Employees in the Classified Civil Service." Hearings before the House Committee on Reform in the Civil Service, 63d Congress, 2nd Session, Washington, 1914.
- Dawson, Miles M. Governmental methods of providing Old Age Pensions *in* International Actuarial Congress VII, Amsterdam, 1912. Reports, Memoirs and Proceedings, Amsterdam, 1912, Vol. I, pp. 207-236.
- Dawson, Miles M. Old Age Pensions vs. Old Age Annuities *in* Bulletin des Assurances Sociales—Paris, 1912, Tome 23, pp. 33-61, Congress International des Assurances Sociales.
- d'Roode, Albert. Pensions as Wages, *in* The American Economic Review, Vol. III, p. 288.
- Eliot, Charles W. Teachers' Tenure of Office, Address before Massachusetts Teachers' Association, Dec. 30, 1879, *in* his "Educational Reform," Century Co., New York, 1898.
- Falkner, Roland P. Retirement funds for government employees. Proposed superannuation methods, *before* National Civic Federation Meeting 9, 1908, *in* proceedings New York, 1909, pp. 187-196.
- Farr, William. Statistics of the Civil Service, *in* Journal of the Statistical Society of London, 18th Dec. 1848.

APPENDIX

- Goodnow, Frank J. Constitutionality of Old Age Pensions, *in* American Political Science Review, Vol. 5, May, 1911.
- Groomes, John, of the War Department. Observations on the superannuation fund proposed to be established in the several public departments by the Treasury minutes of 10 August 1821. London, C. Richards, 1822.
- Henderson, Charles Richmond. "Industrial Insurance, Municipal Pension Systems and Pensions for Teachers," *in* the American Journal of Sociology, May, 1908, Vol. 13, p. 841.
- Hewat, Archibald. Widows' and Pension Funds, Edinburgh, T. and A. Constable, 1912.
- Hoffman, Frederick L. American Public Pension Systems and Civil Service Retirement Plans *in* International Actuarial Congress VII, Amsterdam, 1912. Reports, Memoirs and Proceedings, Amsterdam, 1912, Vol. I, pp. 237-282.
- Hoffman, Frederick L. The problem of poverty and pensions in old age *in* Proceedings National Conference of Charities and Corrections, Fort Wayne, 1908, Session 35, pp. 219-234.
- Hoffman, Frederick L. Poverty and Pensions in Old Age *in* American Journal of Sociology, September, 1908.
- Lefebvre, L. Charles. Les pensions de retraites dans les administration publiques en France. Le regime de retraites des chemins de fer del etat, *in* International Actuarial Congress VII, Amsterdam, 1912. Reports, Memoirs and Proceedings, Amsterdam, 1912, Vol. I, pp. 301-307.
- McLaughlan, James J. Fundamental Principles of Pension Funds, the Inaugural address session, 1908-9, Transactions of the Faculty of Actuaries.
- Manly, Henry W. Staff Pension Funds *in* The Journal

RETIREMENT OF PUBLIC EMPLOYEES

- of the Institute of Actuaries, V. 36, October, 1901.
- Manly, Henry W. Staff Pensions *in* the Journal of the Institute of Actuaries, V. 45, April, 1911.
- Manly, Henry W., and Ackland, Thomas G. "On the Superannuation and Pension Funds of certain Metropolitan Borough Councils, Their Establishment, Administration and Actuarial Investigations" *in* the Journal of the Institute of Actuaries, Vol. 46, 1912, p. 327.
- Marr, Vyvyan. Widows' funds: The valuation of a widow's annuity, *in* Transactions of the Faculty of Actuaries, Vol. 2, pp. 307.
- Mason, Edward F. Municipal Pensions *in* National Municipal Review, Baltimore, 1913, Vol. 2, p. 260-264.
- Peters, Michael. The Mischief of Pensions *in* The Gentleman's Magazine, Vol. 303, pp. 113-119, London, 1907.
- Phelps, Edward Bunnell. A summary of the possibilities and probable cost of the proposed plan for workmen's compensation and old age pensions for American Brewery Workmen. Compiled by E. B. Phelps for the U. S. Brewers' Association, New York, 1911.
- Phelps, Edward Bunnell. American Brewery Workers' surprising rejection of their proffered workmen's compensation and old age pensions—a clear-cut case of the consciousness of kind. American Underwriters' Magazine and Insurance Review, New York, 1912. Vol. 37, pp. 113-124.
- Pritchett, Henry S. The Moral Influence of a University Pension System *in* Popular Science Monthly, New York, 1911, Vol. 79, pp. 502-513.
- Pritchett, Henry S. A Pension System for Public Schools, *in* the Independent, New York (1913), Vol. 74, p. 617.
- Prosser, Charles A. Teachers' Annuities and Retirement Allowances, *in* Journal of Education, Dec. 28, 1911, Vol. 74, p. 683.

APPENDIX

- Prosser, Charles A., and Hamilton, W. I. *The Teacher and Old Age*, Boston, Houghton Mifflin Co., 1913.
- Roth, Louis. Pension funds for public service employees *in the Survey*, New York, 1915, Vol. 35, pp. 109-110.
- Rubinow, Isac Max. *The Pension Plan for the Brewing Industry in the Survey*, New York, 1912, Vol. 29, pp. 360-363.
- Rubinow, Isac Max. *Social Insurance*, New York, Henry Holt & Co. (1913).
- Seager, Henry R. *Social Insurance*, New York. Macmillan Co., 1910.
- Studensky, Paul. *The Pension Problem and the Philosophy of Contributions*. The Pension Publishing Co., Woolworth Bldg., N. Y., 1917. (Chapters I-IV appeared in the "American Teacher" Oct., Nov., Dec., 1916; Feb., March., 1917.)
- Thwing, Charles F. *A Pension Fund for College Professors in North American Review*, Vol. 181, pp. 722-733, New York, 1905.
- Vanderlip, Frank A. *Insurance for Workingmen in North American Review*, Dec., 1909.

INDEX

	PAGE
ACKLAND, T. G.,	
Quotations from testimony regarding average salary plan,	143
Reference to writings of,	361
ACTUARIAL DEFICIT ON CREATION OF SYSTEM,	
Origin of,	356-357
Effect of ignoring,	357-358
Methods of financing,	358-362
ACTUARIAL RESERVE PLAN VS. ASSESSMENT OR CASH DISBURSE-	
MENT PLAN,	325-337
Difference between the two,	325-328
Merits and defects of assessment or cash disbursement	
plan,	328-334
Merits and defects of actuarial reserve plan,	334-337
Conclusions,	434-436
ACTUARIAL RESERVE SYSTEM, CREATION, OPERATION AND	
MANAGEMENT OF,	338-355
Conclusions,	436-437
ACTUARY, NECESSITY FOR	34-36, 340
Position of, in planning system,	341-343
Work of, in developing system,	343-353
Work in operating existing system,	353-356
Conclusions in respect to,	436-437
AGE AT ENTRANCE IN RELATION TO COST OF BENEFITS,	
Superannuation,	164
Disability,	205
AGE CONDITIONS FOR RETIREMENT,	
Analysis of problem,	42
General discussion,	104-120
In the English Civil Service,	110, 111
Conclusions regarding,	394-399
ALLEN, S. J. H. W.,	
Reference to writings of,	251, 459
AMOUNT OF BENEFIT,	
Analysis of problem,	44-52, 54
Superannuation,	120-162
Disability,	190-201

INDEX

	PAGE
Withdrawal,	216, 231-232
Death in active service not in performance of duty,	243-255
Death in active service in performance of duty,	264-271
Present employees,	304-308, 311-315, 317
Conclusions,	402-426
APPROPRIATIONS,	
Form of,	371-373
ASSESSMENT PLAN VS. ACTUARIAL RESERVE PLAN,	
Analysis of problem,	60-62
General discussion,	325-337
Difference between the two,	325-328
Merits and defects of assessment or cash disbursement plan,	328-334
Merits and defects of actuarial reserve plan,	334-337
Conclusions,	434-436
ATTACHMENT,	
Benefits to be free from,	374-376
AVERAGE SALARY PLAN,	139
BALDWIN, F. SPENCER,	
Quotations from writings of,	33, 34
Reference to writings of,	459
BENEFICIAL SOCIETIES IN THE PUBLIC SERVICE,	238
BENEFITS,	
Contingencies possibly covered by, enumerated,	39, 40
Conclusions regarding,	389, 390
See also Superannuation, Disability, Withdrawal and Death.	
BIBLIOGRAPHY,	453-463
BLASCHKE, DR. ERNEST,	
Summary from writings of,	331, 332
BORROWING FROM FUND,	378-380
BRANDEIS, LOUIS D.,	
Quotation from,	25, 228
Reference to writings of,	459
BROWN, HERBERT D.,	
References to writing of,	4, 27, 68, 210, 213, 236
Reference to plans and work of,	79, 80, 339
BUCK, GEORGE B.,	
Acknowledgement of indebtedness to,	xiii
	466

INDEX

	PAGE
Reference to writings of, 165, 169, 179, 203, 205, 208, 251, 253, 303, 364, 459	
Reference to work of,	339
BURN, JOSEPH, Reference to writings of,	460
CARNEGIE FOUNDATION FOR ADVANCEMENT OF TEACHING, Quotation from reports of, 70, 74, 120, 157, 170, 298, 299, 300 Reference to report of,	95, 369
CASH DISBURSEMENT PLAN. <i>See</i> ASSESSMENT PLAN.	
CHAMBERLAIN, HON. JOSEPH, Statement regarding nature of retirement benefits,	77
CLEVELAND, FREDERICK A., Acknowledgement of indebtedness to,	xiii
COLLIE, SIR JOHN, Reference to writings of,	188, 460
COMMUTATION OF BENEFITS, . Objection to,	375-378
COMPENSATION, Benefits, part of,	21-23, 71-76, 387, 388
COMPULSORY MEMBERSHIP,	26-28
COMPULSORY RETIREMENT, Conclusions regarding necessity for,	108-112 394-396
CONCLUSIONS,	381-450
CONDITIONS UPON WHICH BENEFITS SHALL BE GRANTED, Analysis of problem, Conditions for superannuation or service benefit, Disability, Present employees, Conclusions,	41-44 104-120 180-190 303, 310, 316, 321 393-402
CONTINGENCIES INVOLVED IN ESTABLISHING RETIREMENT SYS- TEM, Enumerations of, Conclusions regarding covering,	39, 40 389-393
CONTRIBUTIONS, ARGUMENTS FOR AND AGAINST, Nature of problem, General discussion, In case of disability in performance of duty,	57-60, 67-79 79-91 211

INDEX

	PAGE
In case of death not in performance of duty,	256
In case of death in actual performance of duty,	271, 272
Present employees,	296-299, 303, 310, 319
Conclusions,	429, 432
CONTRIBUTIONS,	
Factors determining amount of. <i>See</i> Cost of Benefits.	
CONTRIBUTIONS,	
Indirect,	99-102
CONTRIBUTIONS, RETURN OF. <i>See</i> WITHDRAWAL AND DEATH.	
COST OF BENEFITS,	
Analysis of Problem,	52-57
Superannuation Benefit,	162-170
Disability Benefit,	201-206
Death Benefit,	235-256
Present Employees,	302, 308, 316, 319
Conclusions,	426-428
COST OF SUPERANNUATION,	5-9
COST AS AFFECTING CHOICE OF RETIREMENT AGE,	118
COSTS, DIVISION OF, BETWEEN GOVERNMENT AND EMPLOYEES,	
Analysis of problem,	51-61
General discussion,	92-102
In case of disability benefit,	206-208
In case of disability in actual performance of duty,	211
In case of special death benefits,	256, 257
In case of death in actual performance of duty,	271
Present employees,	303, 309, 319
Conclusions,	429-434
DAWSON, MILES M.,	
Reference to writings of,	27, 68, 460
Quotation from writings of,	79
DEATH AFTER RETIREMENT,	
Benefit in event of,	273-279
Nature of problem,	273
Death after superannuation retirement,	274-277
Death after disability retirement from ordinary causes,	277, 278
Death after disability retirement, both disability and death due to actual performance of duty,	278, 279
DEATH IN ACTIVE SERVICE, DEATH DIRECT RESULT OF ACTUAL PERFORMANCE OF DUTY,	
Interests of parties in benefit,	261-272
Conditions upon which granted,	261-264
	264
	468

INDEX

	PAGE
Amount of benefit in relation to salary,	264-269
Amount of benefit in relation to economic need,	269-271
Benefit non-contributory,	271
DEATH IN ACTIVE SERVICE, NOT CAUSED BY ACTUAL PERFORMANCE OF DUTY,	
Objects sought in establishing benefit,	233-235
Objections to benefit,	235-243
Amount of benefit,	243-255
The cost of insurance benefit,	255
Contributory vs. Non-contributory for special death benefit,	256, 257
Adjustment to other benefits,	257-259
Summary,	259, 260
DEPENDENTS, IN RELATION TO SUPERANNUATION BENEFIT,	
Sex of employee,	159-168
Benefit on withdrawal,	219-220, 224, 225
Death benefit,	236-240, 247, 251-255, 265-271, 274
Present employees,	295
Conclusions,	392, 422, 423
DE ROODE, ALBERT,	
Quotations from writings of,	75, 76
DISABILITY BENEFIT,	
Definition,	171-215
Objects sought in establishing,	171
Danger of fraud in,	13, 14, 172
Conditions upon which granted,	174-180
Amount in relation to salary,	180-190
Amount in relation to length of service,	190-197
Amount in relation to social and economic need,	197-199
Cost of,	199-201
Contributory vs. Non-contributory,	201-206
In actual performance of duty,	206-208
Conclusions,	208-215
	400-402
DISCRETIONARY BENEFITS, OBJECTIONS TO,	
Superannuation benefits,	105-108, 123-125
Disability benefits,	191, 192
Death benefit,	247, 265
Conclusions,	393, 402
DISMISSAL. <i>See also</i> WITHDRAWAL.	
DISMISSAL WITHOUT BENEFITS AS SOLUTION OF SUPERANNUATION PROBLEM,	
Objections to,	10
EFFICIENCY RATINGS, USE OF,	
	11

INDEX

	PAGE
ELIOT, CHARLES W., Bibliography,	460
ENGLISH CIVIL SERVICE, Origin of competition examinations in, Voluntary life insurance in, Introduction of death benefit in, Experience of, indicating incidence of cost of retirement systems, History of contributions in,	13 27 68 72, 73, 74 81-84
FALKNER, ROLAND P., Reference to writings of,	299, 460
FARR, WILLIAM, Reference to writings of,	27, 155 27, 155, 460
FEMALES. <i>See</i> SEX.	
FLAT PENSION, LIMITED APPLICABILITY OF,	125
FORFEITURES, Conclusions against, in event of dismissal,	216-232 391, 392
FRASER, DUNCAN,	134
FRAUD, DANGER OF, IN DISABILITY BENEFITS,	174-177
FUTURE ENTRANTS VS. PRESENT EMPLOYEES,	17-20, 290-300, 386, 387
GOODNOW, DR. FRANK J., Reference to article by,	16, 460
GRAFT, PENSION, DANGER OF,	34
GRAHAM, SIR J. R. G., Testimony regarding introduction of contributions in English systems,	83
GROOMES, JOHN, Quotation from, Bibliography,	164 461
GUARANTEES, OF SOLVENCY, Of interest rate,	100, 433 101
HAMILTON, W. I. <i>See</i> PROSSER, C. A.	
HARDY, GEORGE F., Extract from testimony of,	327

INDEX

	PAGE
HEALTH INSURANCE, General in relation to retirement system in England,	181
HENDERSON, CHARLES RICHMOND, Bibliography,	461
HEWAT, ARCHIBALD, Reference to writings of,	166, 230, 461
HOFFMAN, FREDERICK L., Acknowledgement of indebtedness to, Reference to writings of, Quotation from writings of,	xiii 31, 461 160
HUGGETT, JAMES, Reference to testimony regarding widows' and orphans' funds, Quotation from,	240 242
HUTCHESON, WILLIAM A., Reference to work of,	339
INCIDENCE OF COST OF RETIREMENT BENEFITS, 21-23, 71-76, 291-294, 387, 388	
INDIRECT CONTRIBUTIONS,	99-102, 432-434
INEFFICIENT EMPLOYEE, TREATMENT OF, UNDER RETIREMENT SYSTEM,	280-282
KING, GEORGE H., Quotation from writings of,	70, 71, 350
LEFEBVRE, L. CHARLES, Bibliography,	461
LIDSTONE, G. J., Comments regarding necessity for figures for each experience,	350
LIFE INSURANCE, OPTIONAL SYSTEM OF, IN ENGLISH SERVICE, General discussion of death benefits as part of retirement system, Conclusions,	27 233-280 389, 421-426
LINDSAY, SAMUEL McCUNE, Acknowledgement of indebtedness to,	xiii
LOANS TO MEMBERS,	378-380
McLAUGHLAN, JAMES J., Reference to writings of,	68, 245, 377, 461

INDEX

	PAGE
MANAGEMENT, EXPENSES OF, UNDER CONTRIBUTORY SYSTEM,	
DISCUSSED,	89-91
Expenses of, to be borne by government,	99
Method under actuarial reserve system,	338-355
Conclusions regarding,	434-439
MANLY, H. W.,	
Quotations from writings of,	35, 68, 69, 70, 137, 351
Reference to writings of,	361, 461
MAXIMUM AND MINIMUM LIMITATIONS ON BENEFITS,	123-124
MEDICAL EXAMINATIONS,	
In connection with disability benefits,	175-178
MODEL SYSTEM,	
None universally applicable,	385
MURRAY, SIR GEORGE,	
Reference to report of,	4
NATIONAL CIVIL SERVICE REFORM LEAGUE,	
Reference to reports of,	17
Quotation from reports of,	9, 10, 77, 221, 222
NEW SOUTH WALES,	
Reference to report on proposed system for,	25, 250
NEW YORK CIVIL SERVICE REFORM ASSOCIATION,	
Reference to report of,	28
Quotation from report of,	271, 272
OBJECTIONS TO RETIREMENT SYSTEM,	26-34
OBJECTS SOUGHT IN ESTABLISHING SYSTEM,	1-25
By the government,	3-17
By the employee,	17-25
By the public,	25
OCCUPATION,	
In relation to cost of benefits, superannuation,	169
Disability,	206
OPTIONAL SYSTEMS, INADEQUACY OF,	26
OPTIONS IN SETTLEMENT, ETC.,	274-277, 374-380, 423
ORPHANS' AND WIDOWS' FUND,	240-243, 247, 422
"PAPER FUND" METHOD OF OPERATING SYSTEMS,	329

INDEX

	PAGE
PENSION, Objection to use of term,	xi-xii
PENSION GRAFT, Danger of,	34
PETERS, MICHAEL, Reference to writings of,	226, 235, 237, 238, 462
PHELPS, EDWARD BUNNELL, Bibliography,	462
PRESENT EMPLOYEES,	289-324
Difference between, and future entrants,	290-300
In homogeneity,	290-291
In economic relation to retirement system,	291-294
In period of social evolution,	295
In desires for benefits,	295
In ability to provide benefits,	296-299
In susceptibility to moral injury,	299-300
Division of present employees,	300
Present employees to be retired upon adoption of system,	301-308
Contingencies to be covered,	301
Superannuation benefit,	302
Cost,	302
Division of cost,	303
Conditions upon which granted,	303
Amount of benefit,	304-308
Employees continued after adoption of system, benefits for past services,	308-318
Contingencies to be covered,	308
Superannuation benefit,	308-316
Cost of benefit,	308
Division of cost,	309
Conditions upon which granted,	310
Amount of benefit,	311-316
Disability benefit,	316
Cost of benefit,	316
Conditions upon which granted,	316
Amount of benefit,	317
Employees continued after adoption of system, benefit for future services,	318-322
Contingencies to be covered,	318
Superannuation benefit,	319
Cost and distribution,	319
Conditions upon which granted,	321
Amount of benefit,	321
Withdrawal benefit,	322
Death benefit,	322
Summary,	322-324

INDEX

	PAGE
PRITCHETT, HENRY S.,	110
Reference to writings of,	27, 31, 32, 369, 462
Quotations from,	ix, xii, 32, 298, 299, 300
Opinion of, regarding thrift,	30
PRIVILEGED CLASS, CREATION OF,	32
PROBLEM OF DEVISING A RETIREMENT SYSTEM,	
Analysis of,	38-66
PROSSER, C. A.,	84
Bibliography,	462
Quotation from writings of,	75, 84, 223, 375
REORGANIZATION,	
Benefit in event of,	283-288
RESIGNATION, RIGHT TO BENEFIT IN EVENT OF,	221-231
In connection with disability benefit,	206
<i>See also</i> Withdrawal.	
RISSE, RENE,	
Summary from writings of,	335, 336
ROTH, LOUIS,	
Bibliography,	463
RUBINOW, I. M.,	
Reference to writings of,	27, 332, 463
SALARY, AMOUNT OF BENEFIT IN RELATION TO,	
Superannuation benefit,	121-148
Disability benefit,	190-197
Death benefit,	246-250, 264, 265, 268
Present employees,	304-306, 311-316
Conclusions regarding superannuation benefit,	403-416
Regarding disability benefit,	416-419
SALARY SCALE,	
Analysis of problem,	44-47
In disability benefits,	194
Nature of,	127
Objections to use of,	128-137
SAVINGS BANK PLAN OR SAVINGS AND ANNUITY PLAN,	122, 140-148, 151-153
SEAGER, HENRY R.,	
Reference to writings of,	24, 463
Quotations from,	157, 228

INDEX

PAGE

SERVICE BENEFIT. *See* SUPERANNUATION BENEFIT.

SERVICE, LENGTH OF, IN RELATION TO SUPERANNUATION BENEFIT,	112-115, 148-155, 410
Relation to disability benefit,	187-190, 197-199
In relation to death benefit,	250-252

SEX, IN RELATION TO COST OF BENEFITS,	
Problem,	56
Superannuation,	166-169
Disability,	205, 206

SICK LEAVE,	180-184
-------------	---------

SIES, RAYMOND W.,	
Reference to report of,	5, 17, 76, 453
Quotation from report of,	89-91

SIZE OF SERVICE. *See* SMALL SERVICES.

SMALL SERVICES,	
Method of operating systems for, on actuarial reserve basis	363-370

SNEDDEN, DAVID,	
Quotation from,	78

STUDENSKY, PAUL,	
Acknowledgement of indebtedness to,	xiii
Bibliography,	463

SUPERANNUATION,	
Cost of,	5-9

SUPERANNUATION OR SERVICE BENEFIT,	103-170
Objects sought,	3-25, 103
Conditions upon which granted,	104-120
Amount of benefit in relation to amount of salary,	121-148
Amount of benefit in relation to length of service,	148-158
Amount of benefit in relation to economic and social needs of the employee,	155-162
Cost of benefit,	162-170

SUTTON, WILLIAM,	
Discussion of the salary scale,	135-137
Reference to writings of,	175

SYMMONS, FRANK PERCY,	
Bibliography,	460

INDEX

	PAGE
TEMPORARY DISABILITY,	180-184, 402
TERMINAL SALARY PLAN, Objections to,	137
TERM OF OFFICE, FIXED, Objections to,	11
THRIFT, DISCOURAGEMENT OF,	29
THWING, CHARLES F., Bibliography,	463
TRANSFERS, DEVELOPMENT AND USE OF,	116-118
TREVELYAN, SIR C. E., Testimony regarding maximum and minimum limitations,	124
UNIVERSITIES, FEDERATED, OF ENGLAND, Retirement Plan of,	368
VALUATIONS, ACTUARIAL, Necessity for, Nature of, How often necessary,	353 353-355 355
VANDERLIP, FRANK A., Extract from writings of, Bibliography,	336, 337 463
VOLUNTARY INSURANCE, INSUFFICIENCY OF,	236-239
WEBB, BEATRICE, Quotations from writings of,	30, 176
WEBB, SIDNEY, Quotations from writings of,	30 30, 176
WELBY, SIR R. E., Testimony of, regarding creation of fund,	329
WIDOWS' AND ORPHANS' FUND, Objections to,	240-243, 247, 251-255, 422
WILLOUGHBY, WILLIAM F., Acknowledgement of indebtedness to,	xiii
WITHDRAWAL, WHETHER BY RESIGNATION OR DISMISSAL, Extent of benefit advocated, Distinction between resignations and dismissals, argu- ments against,	216-232 216 217-221

INDEX

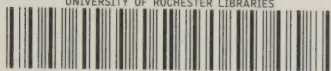
	PAGE
Desirability of benefit,	221-231
Amount of benefit,	231, 232
Commutation of pension in event of,	376
WOMEN. <i>See</i> SEX.	
WORKMEN'S COMPENSATION SYSTEMS DISTINGUISHED FROM RETIREMENT SYSTEMS,	171-172

(1)

1 52

2 1

UNIVERSITY OF ROCHESTER LIBRARIES



3 9087 00543891 8

Central Library

Date Due

MAR 5 - 1945

220828

WOMEN'S COLLEGE

JF

1671

M56p

